

# **Marine Mammal Protection Act of 1972**

## **Annual Report 1982/83**

June 1983



**U. S. DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
National Marine Fisheries Service

COVER:

Mature bull northern elephant seal on San Clemente  
Island, Calif. Photo by Dana Seagars, NMFS, Southwest  
Region.

# **Marine Mammal Protection Act of 1972 Annual Report**

April 1, 1982, to March 31, 1983

**U.S. DEPARTMENT OF COMMERCE**

**Malcolm Baldrige, Secretary**

**National Oceanic and Atmospheric Administration**

John V. Byrne, Administrator

National Marine Fisheries Service

William G. Gordon, Assistant Administrator for Fisheries



**THE SECRETARY OF COMMERCE**  
Washington, D.C. 20230

JUN 9 1983

President of the Senate  
Speaker of the House of Representatives

Sirs:

I am pleased to submit the Annual Report of the Department of Commerce regarding the administration of the Marine Mammal Protection Act of 1972 for the period April 1, 1982 through March 31, 1983, as required by Section 103(f) of the Act.

The Department of Commerce is responsible for implementing the Act with respect to whales and porpoises of the order Cetacea and seals and sea lions of the suborder Pinnipedia. The report details the activities of the Department regarding these marine mammals.

Sincerely,

*Malcolm Baldrige*  
Secretary of Commerce

Enclosure



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Figure 1 - A feeding humpback whale on Stellwagen Bank off Gloucester, Mass. lunges through schools of sand lance. Photo by Mason Weinrich, Cetacean Research Unit, Gloucester Fishermen's Museum.

## INTRODUCTION

Ten years ago, the Congress enacted the Marine Mammal Protection Act of 1972 (the Act or MMPA) and committed the United States to continuing long-term management and research programs that would conserve and protect these animals. Although there are a few exceptions, the Act placed a moratorium on taking or importing marine mammals or their products into the United States, and it applies to persons subject to U.S. jurisdiction on the high seas. In 1976, the Magnuson Fishery Conservation and Management Act (MFCMA) expanded U.S. control of marine mammals to include the 200 mile fishery conservation zone (FCZ).

The Act delegated authority and responsibility for oceanic marine mammals to the Secretary of the Agency where the National Oceanic and Atmospheric Administration (NOAA) operates. Under NOAA, the National Marine Fisheries Service (NMFS) is responsible for species of the order Cetacea, whales and dolphins, and the order Carnivora, suborder Pinnipedia, seals and sea lions, except walruses. The Department of the Interior is responsible for the dugong, manatee, polar bear, sea otter, and walrus.

The moratorium does not apply to every marine mammal species. Those already managed under international agreements, such as the northern fur seal, are exempt as long as the agreements further the purposes of the Act. Also, under a permit system, marine mammals may be taken for scientific research, public display, and incidental to commercial fishing. The 1981

amendments to the Act added two categories of "small take" to the moratorium exception. Further, certain natives of Alaska may take marine mammals for subsistence use and production of handicrafts. Although the Act made management of marine mammals a Federal Government responsibility, it provides for the return of their management to the States.

The National Marine Fisheries Service grants or denies requests for exemptions, issues permits, carries out research and management programs, enforces the Act, participates in international programs, and issues rules and regulations. To carry out its mission to conserve and protect marine mammals, NMFS cooperates with the States, conservation organizations, the public, other Federal agencies, the Marine Mammal Commission, and many constituent groups including scientific researchers and the public display community.

NMFS's marine mammal research programs are the responsibility of the Southwest Fisheries Center, La Jolla, Calif.; the Southeast Fisheries Center, Miami, Fla.; the Northeast Fisheries Center, Woods Hole, Mass.; and the National Marine Mammal Laboratory (NMML), Northwest and Alaska Fisheries Center, Seattle, Wash. Management programs are the responsibility of the Northeast Region, Gloucester, Mass.; the Southeast Region, St. Petersburg, Fla.; the Northwest Region, Seattle, Wash.; the Southwest Region, Terminal Island, Calif.; and the Alaska Region, Juneau, Alaska.

This annual report to Congress is available from the Office of Protected Species and Habitat Conservation, NMFS, Washington, D.C. 20235.

## SUMMARY

The Marine Mammal Protection Act has been in effect for over a decade, and, although many issues remain, progress has been made in solving some of the problems addressed by the Act. One problem was the incidental take of porpoises in the tuna purse-seine fishery in the eastern tropical Pacific. In 1972, the year the Act was passed, over 350,000 porpoises died in tuna nets. In 1982, a little over 20,000 porpoises were killed in this fishery. However, the recent decision of the Ninth Circuit Court of Appeals in Balelo v. Baldrige, which invalidated the regulation

requiring the placement of marine mammal observers aboard tuna boats, has jeopardized NMFS's ability to carry out its statutory responsibilities effectively. The observers' duties had been to collect scientific information and monitor the take of porpoise. NMFS needs this information to issue a general permit to allow fishing on porpoise and to enforce against violations of the Act. At this time, we are working closely with representatives of the tuna industry and the environmental community to work out a satisfactory solution that will allow NMFS to fulfill its scientific and management responsibilities.

NMFS operates a successful permit system that allows marine mammals to be taken or imported for scientific research and public display. NMFS decides whether to grant the requests for permits on a timely basis and monitors all currently valid permits for take which number 253 at this time.

Since most marine mammals are highly migratory, we have international agreements to protect them. Probably the most visible international achievement in 1982 was the moratorium on commercial whaling voted on by the International Whaling Commission (IWC) at its 34th annual meeting in Brighton, England. The United States has vigorously pressed for a moratorium through the IWC since 1972. Although Japan, Norway, Peru, and the U.S.S.R. have filed formal objections to the "cessation", the United States supports the decision and will take advantage of all U.S. laws and regulations to ensure that the cessation is carried out.

For several years, the IWC has set quotas on the number of endangered bowhead whales that can be taken for subsistence by Alaska natives. NOAA and the Alaska Eskimo Whaling Commission (AEWC) regulate this hunt through a cooperative agreement. During the 1982 spring and fall hunting season, the natives landed eight out of nineteen whales struck. Scientists from the National Marine Mammal Laboratory reanalyzed the data concerning the estimated population size of the bowhead whale and presented these findings to the Scientific Committee of the IWC which now estimates the present stock size at 3,857; the previous estimate was 2,264.

In 1981, the Congress made several changes to the Act, and, in 1982, NMFS began to implement these changes. To implement one of the amendments concerning a small take of marine mammals, NMFS published final regulations that specify procedures for allowing,

on request, the small take of marine mammals incidental to specified activities. The first part covers general procedures for requesting a take. The second part covers the take of ringed seals during seismic exploration activities on the ice in the Beaufort Sea. For the 1983 season, NMFS issued six Letters of Authorization that allow an incidental take of ringed seals from Point Barrow east to Demarcation Point on the U.S.-Canadian border. The request for NMFS to develop "small take" regulations must come from the person or group that will be conducting the activities. Also, we are developing proposed regulations that cover the "small incidental take" of marine mammals during commercial fishing operations.

The '81 amendments also made changes concerning the return of management of marine mammals to the States. NMFS will publish the final regulations in May 1983 concerning return of management: these regulations were developed jointly with the Fish and Wildlife Service. Several States, including Alaska and California, are interested in resuming management of certain species.

NMFS issues general permits that allow foreign and domestic fisheries to take marine mammals incidental to commercial fishing operations provided that both are fishing in conformance with regulations that protect these animals. The general permit that allows the largest take is the one issued to the American Tunaboat Association to take 20,500 porpoises each year. The next largest permit goes to the Japan Fisheries Agency and allows a take of 5,975 animals. Of these, 5,500 are Dall's porpoises that die in drift gillnets used in Japan's high seas salmon fishery in the North Pacific Ocean. This fishery, which takes place in the FCZ, is subject to the conditions of a Memorandum of Understanding between the U.S. and Japan concerning coordinated research efforts and compliance with the permit as well as other requirements of the MMPA.

Research on Dall's porpoise became controversial after NMFS issued a research permit to its Northwest and Alaska Fisheries Center that allowed the killing of up to 960 Dall's porpoises over a 5-year period. Members of Congress proposed a 3-year extension to the general permit to Japan in exchange for cancellation of the portion of the research that involved killing the porpoises. The Congress amended the North Pacific Fisheries Act in December 1982, and the permit to Japan was extended until 1987 provided certain conditions are met. Meanwhile, NMFS will use other methods of

research to fulfill its responsibilities to ensure that the number of porpoises killed in this fishery is reduced.

Although NMFS is the lead Federal Government agency on many marine mammal projects, other agencies also are involved in marine mammal research. These agencies are usually involved because activities that they authorize affect marine mammals. This is the case of the Minerals Management Service (MMS), Department of the Interior, which has responsibility under the Outer Continental Shelf (OCS) Lands Act for leasing, exploration, production and development of OCS oil and gas resources as well as for predicting, detecting, and mitigating the adverse effects of OCS oil and gas development on the environment. NMFS, along with the U.S. Fish and Wildlife Service, is responsible under the MMPA and the Endangered Species Act (ESA) for reviewing proposed actions and advising the MMS of the measures that may be needed to assure that the proposed actions will not be to the disadvantage of marine mammals and other wildlife.

While the MMPA is the most prominent law protecting marine mammals, the NMFS conducts research, administers programs, and receives funds under other wildlife laws such as the Whaling Convention Act of 1949, the Fur Seal Act of 1966, and the Endangered Species Act of 1973. Therefore, in our report on administration of the MMPA, we include the total research and management programs for marine mammals although these activities may be partially funded or implemented under another law.

## FUNDING

In a report published by the Marine Mammal Commission, Survey of Federally-Funded Marine Mammal Research and Studies from FY 70 - FY 81, it was found that at least 14 different Federal department-level agencies have funded research. Five agencies, including the Departments of Commerce, Defense, and Interior, as well as the Marine Mammal Commission and the National Science Foundation funded 72 to 91 percent of the annual number of projects and supported 70 to 93 percent of the annual cost of Federally-funded research involving marine mammals. From 1970 through 1980, Federal funding increased; however, by 1981, reduced funding was the common trend. One of the conclusions of the report was that "wasteful duplicative research was not found to

occur. Research topics have been numerous and, as a whole, focused on problems relevant to issues under the MMPA." The report found that between FY (fiscal year) 74 and FY 77, Federal funding of cetacean and pinniped research was about equal. Beginning in FY 78, funds for cetacean research increased substantially, and by FY 81, funding of cetacean research exceeded funding of pinnipeds by more than four times. Also, more regionally-oriented research has occurred in waters adjacent to Alaska than along any other State or group of adjacent States. In Commerce, expenditures on marine mammal studies by NMFS quadrupled from FY 74 to FY 80. These increases in funds reflect appropriations to this agency under the MMPA and the ESA. Also, the study found that in recent years, over one-half of the Federal funds spent annually on marine mammal research have been for studies carried out by scientists employed by Federal agencies as opposed to the non-Federal scientific community.

In FY 1982, NMFS expended \$10,201,000 on research and management of its marine mammal programs. In FY 83, the projected funds also are \$10,201,000.





Figure 2 - Volunteers in the California Marine Mammal Stranding Network capture an ailing California sea lion for treatment and rehabilitation. Photo courtesy of Glenda Ganny Carroll.

## PART I - ADMINISTRATION

### Implementing the 1981 Amendments to the MMPA

Substantial changes were made to the MMPA by the Congress in 1981, and NMFS has implemented several of these during the past year.

#### Small Take of Marine Mammals

Two of the amendments were made to solve the problem of the unintentional taking of small numbers of non-depleted animals when the taking does not qualify for one of the exceptions to the general moratorium. This change alleviates the burden imposed by the permit, hearing, and regulatory scheme for small takes by commercial fishermen or small takes that were the result of other activities. Neither of the new exceptions requires a permit; although for activities other than commercial fishing, NMFS has had to develop regulations and other means of administration.

Final regulations governing small takes of marine mammals incidental to specified activities were published May 18, 1982. Subpart A of the regulations includes procedures for submitting and evaluating general requests to allow these animals to be taken incidental to a specified activity in a specified geographical region. Subpart B establishes specific regulations to take ringed seals incidental to on-ice seismic activities in the Beaufort Sea from 1982 through 1986. It outlines permissible methods, dates, and locations of takings and requirements for monitoring and reporting.

We issued three Letters of Authorization to seismic exploration companies in 1982 and six Letters for activities in 1983. NMFS issued these Letters based on a finding that the level of taking would have a negligible impact on the ringed seal species or stock and its habitat and on its availability for subsistence use. The specific geographic location in the regulations covers the Beaufort Sea from Pt. Barrow east to Demarcation Pt. These activities may take place only between January 1 and May 31, and two types of energy sources, the vibrator-type and watergun method, have been authorized. These Letters are valid for one year.

In addition, NMFS has requested information and has given advance notice of proposed rulemaking concerning a section of the amended Act that allows NMFS to modify its incidental take regulations and to exempt from the general permit process certain commercial fishing operations performed by U.S. citizens which result in the take of small numbers of non-depleted marine mammals. The proposed regulations will be published in the spring of 1983.

#### Return of Management to States

The amendments adopt a new approach to returning management authority to States since Congress found the previous approach involving Administrative Law Judge (ALJ) hearings and compliance with National Environmental Policy Act (NEPA) procedures to be unworkable. The new approach creates a system that is more likely to achieve the return of marine mammal management authority to the States.

In May 1982, NMFS and the U.S. Fish and Wildlife Service published corresponding proposed regulations that provide for the transfer of marine mammal management authority to the States. These proposed regulations establish procedures for the transfer of management authority as well as the form and minimum requirements of a state application, the relationship between Federal and State wildlife agencies before and after transfer authority, and procedures for the revocation and return to NMFS of management authority. Final regulations are due to be published in May 1983.

#### General Permits - Incidental Take of Marine Mammals During Commercial Fishing Operations

A general permit system established under the Act authorizes the incidental taking of marine mammals by domestic and foreign fishermen during commercial fishing operations. General permits are issued to foreign fishing associations whose nations have a Governing International Fishery Agreement (GIFA) with the United States that allows them to fish in the U.S. fishery conservation zone. Tables 1 and 2 in the Appendix include a list of foreign and domestic fishing corporations with permits and the numbers of marine mammals they are allowed to take.

Domestic fishermen, except those involved in the yellowfin tuna fishery, are allowed to apply for a certificate of inclusion under general permits granted to the Pacific Coast Federation of Fishermen's Association. These permits have been extended to December 31, 1983, and allow a take of 2,480 animals each year. The extension was made pending this agency's issuance of final regulations concerning a small incidental take of non-depleted marine mammals by commercial fishermen.

The requirements for domestic fishermen to obtain a certificate of inclusion have been simplified and the previously required \$10 fee has been waived to encourage fishermen to provide data on the incidental catch of marine mammals.

The Northwest Region issued 1,384 certificates to State licensed and tribal Indian fishermen in 1982 bringing the total number of certificate holders in the region to 4,384. The large number of certificate holders has enhanced the cooperation of fishermen in submitting reports on incidental takes and has augmented the Washington State Department of Game's study on marine mammal/fisheries interactions.

In the domestic fishery, the permit involving the largest numbers of animals was issued to the American Tunaboat Association to take 20,500 porpoise each year from 1981 through 1985. In the foreign fishery, Japan takes the most marine mammals; for 1983, this includes 5,500 Dall's porpoise, 25 northern sea lions, and 450 northern fur seals.

#### Scientific Research and Public Display Permits

One exception to the moratorium on taking is the provision that allows permits to be issued for taking or importing marine mammals for scientific research or public display. Three steps must be taken before a permit can be granted.

1. Receipt and initial review of the application by NMFS, publication of a notice of receipt in the Federal Register, and transmittal of the application to the Marine Mammal Commission for review;

2. A 30-day review of the application by NMFS, the Commission, the public, and other Federal agencies; and
3. Final processing by NMFS, including consideration of comments, and approval or denial of the application.

During the past year, 59 applications were considered. Of these, 42 have been resolved; 32 scientific research permits were issued, and 11 public display permits were issued. There were 121 modifications, amendments, or authorizations for take or related activities.

Over the past 10 years, NMFS has added various means to satisfy the requirements of the Act other than regular permits. These include Letters of Agreement, modifications to permits, and authorizations. All of these have increased the agency's flexibility and provided for faster response since the administrative process has been shortened. For example, during our last reporting year, 32 permits were issued, yet 121 modifications, authorizations, and changes to permits were made.

Letters of Agreement are a response to the availability of many rehabilitated beached and stranded animals and the need to find permanent homes. In most cases, it is unnecessary to take an animal from the wild since these beached and stranded animals can satisfy public display and research needs. Therefore, the Letters of Agreement were developed as an easier alternative to permits since no actual taking is involved. Also, these are usually handled by our Regional offices which, again, take less time.

Modifications to permits represent a way to approve a permit type authorization without actually having to apply for a permit. A modification is any change in terms or conditions of a permit or information supplied in the permit application. Although many of these are subject to a 30-day review by the public and the Marine Mammal Commission, the amount of information required is greatly reduced and review time usually shorter than a regular permit.

Authorizations represent a way to carry out additional activities under an existing permit. These involve less substantial changes than modifications. Transporting an animal

from one facility to another would probably require only an authorization while a change that involved more jeopardy to the animal would require a modification.

Another change made over the years to streamline the permit process includes revised application instructions. In addition to clarifying these instructions, we now include background information on how to modify a permit or obtain a Letter of Agreement, and how to comply with related Acts such as the Animal Welfare Act and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Under the Animal Welfare Act (AWA), the Animal and Plant Health Inspection Service (APHIS), Department of Agriculture, is responsible for the humane handling, care, treatment, and transportation of marine mammals. Standards developed by APHIS are incorporated as conditions to all permits that involve captive marine mammals.

The following tables appear in the appendix and provide a detailed overview of the permit program:

- o common and scientific names of marine mammals requested in scientific research/public display permit applications (table 3);
- o summary of permit applications (table 4);
- o cetacean take requested in scientific research/public display permit applications (table 5);
- o pinniped take requested in scientific research/public display permit applications (table 6);
- o cetacean take authorized by scientific research/public display permits (table 7);
- o pinniped take authorized by scientific research/public display permits (table 8);
- o authorized take for permanent removal from the wild-cetaceans (table 9);
- o authorized take for permanent removal from the wild-pinnipeds (table 10);

#### Marine Mammal Stranding Network

NMFS encourages its regions to develop and assist in operating a Marine Mammal Stranding Network. The Regional Networks include individuals and organizations that cooperate with a NMFS coordinator. Authorized members of a network may collect scientific specimen materials, record the event with the Regional

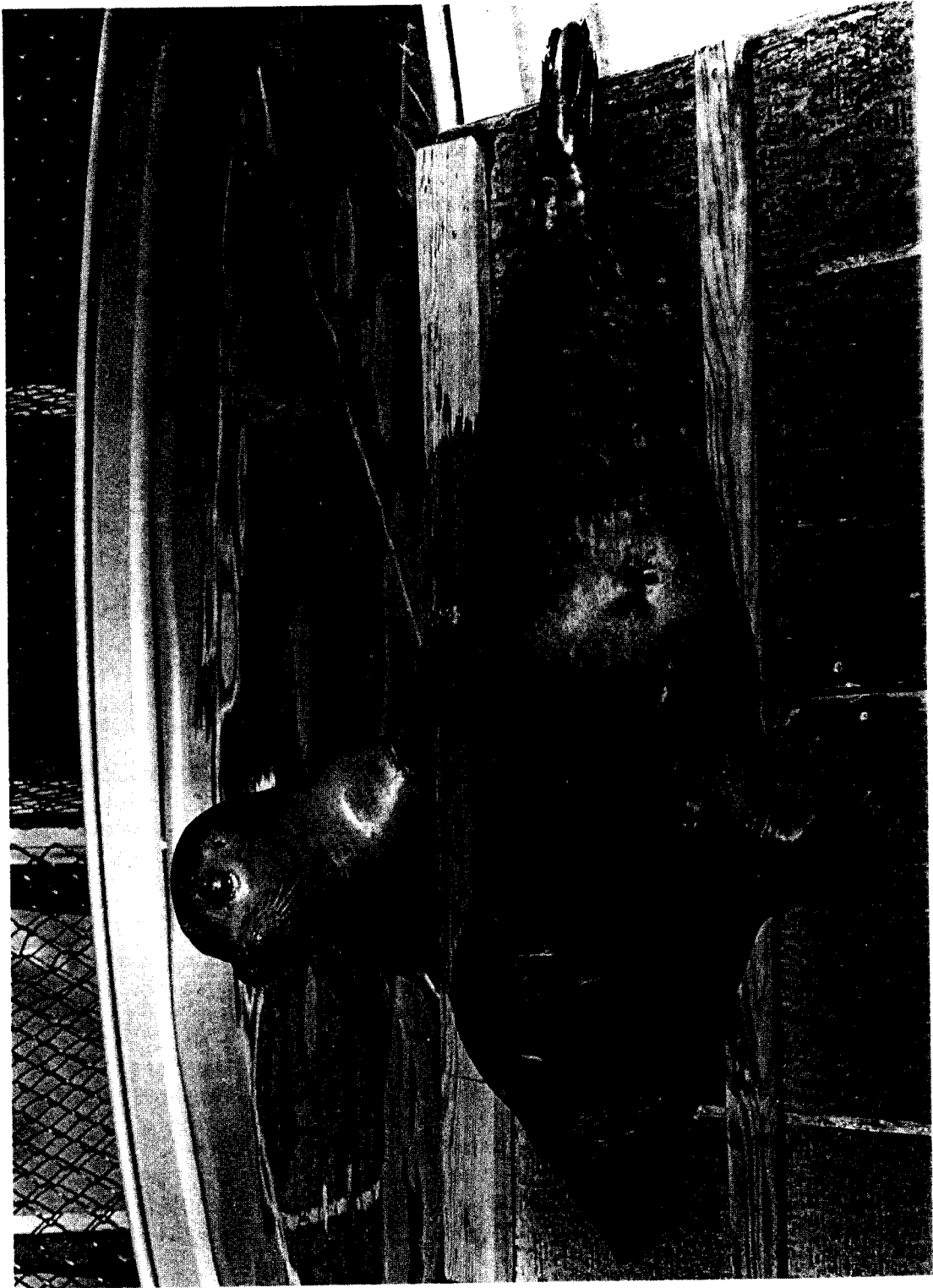


Figure 3 - Injured harbor seals undergoing treatment and rehabilitation at the California Marine Mammal Center, San Francisco. Photo courtesy of Glenda Ganny Carroll.

Coordinator, and are obligated to assist local and Federal authorities in the disposal of the animals. Records of these strandings are no longer forwarded to the Scientific Event Alert Network (SEAN), Smithsonian Institution, Washington D.C., which published a monthly report and maintained a central computer file, since that program was canceled in 1982.

In the Northwest Region, Stranding Network Primary Response Centers were identified during meetings of the principal participants of the Northwest Marine Mammal Stranding Network. Each Center is responsible for all strandings in their respective area. Notification of stranded animals is forwarded to the appropriate Response Center by State enforcement agencies who normally receive the calls from the general public.

The Northwest Region's network is especially active in April and June because of the harbor seal pupping season. Many healthy harbor seal pups are removed from the beaches by well-meaning people who believe the pups are abandoned and aren't aware that they have eliminated the possibility of the pup being reunited with its mother. Press releases and public information brochures are distributed during the pupping season advising concerned citizens not to touch the animals and to call a State enforcement agency who will in turn notify network participants who are qualified to determine whether or not the animal is indeed abandoned or sick and are trained to handle the pups.

The Southwest Region made major progress toward reorganization of the California Marine Mammal Stranding Network by dividing the coast into six geographic sections and holding organizational meetings in each section. Network members were identified as cooperators (those agencies reporting stranding events) or participants (those responding to an event) and assisted with interpretations of their roles and responsibilities. Over 120 persons have been identified as cooperators. Letters of Authorization were developed and have been issued to six rehabilitation centers and fifteen scientific institutions. Also, a directory of Network members has been issued, and a stranding event report form, consistent with that formerly used by the SEAN, is now in use throughout the State. Information from the reports is received monthly at the Southwest Region Office where it is stored in a computer file using a program developed by Southwest Fisheries Center personnel. The printout, identical in format to the SEAN bulletin, will be distributed throughout the Network. The Region is planning to enter the data and analyze a seven year backlog of stranding reports.



In the Southeast Region, the Marine Mammal Stranding and Salvage Network operates through a contractor and has expanded considerably since 1980. It includes State and Federal biologists, law enforcement agents, private aquaria personnel, and other interested persons. In 1982, a total of 157 cetaceans representing at least 15 species were reported.

Summary of Cetacean Strandings and Sightings Reported to the Southeast Marine Mammal Stranding and Salvage Network in 1982.

SPECIES	NUMBER REPORTED	PERCENT OF TOTAL
<u>Tursiops truncatus</u> - Atlantic bottlenose dolphin	89	56.8
<u>Kogia breviceps</u> - Pygmy sperm whale	23	14.7
<u>Balaena glacialis</u> - Right whale	10	6.4
<u>Grampus griseus</u> - Risso's dolphin	5	3.2
<u>Kogia simus</u> - Dwarf sperm whale	4	2.5
<u>Mesoplodon europaeus</u> - Antillean beaked whale	4	2.5
<u>Physeter macrocephalus</u> - Sperm whale	4	2.5
<u>Globicephala macrorhynchus</u> - Short finned pilot whale	3	1.9
<u>Ziphius cavirostris</u> - Goosebeaked whale	3	1.9
<u>Stenella frontalis</u> - Bridled dolphin	2	1.3
<u>Stenella</u> spp.	2	1.3
<sup>1</sup> <u>Delphinus delphis</u> - Common dolphin	1	0.6
<u>Feresa attenuata</u> - Pygmy killer whale	1	0.6
<sup>1</sup> <u>Pseudorca crassidens</u> - False killer whale	1	0.6
Unidentified large whale	5	3.2
TOTAL	157	100.0

<sup>1</sup>Tentative identification

## Law Enforcement

Under the MMPA, it is illegal to take or import marine mammals or their parts or products unless an exception has been made. The moratorium is enforced by NMFS special agents and State enforcement officers under contract to NMFS. California is the only state that has a contract with NMFS at this time.

Most of the 186 alleged violations of the Act investigated by NMFS and State enforcement personnel in the past year involved the illegal importation of marine mammal parts and products. However, a significant number of violations involved illegal takings (39) and tuna-porpoise incidents (20). The Balelo decision (see Legal Actions), which enjoins NMFS from using observer data gathered on tuna purse seine vessels for enforcement purposes, has resulted in a significant decline in cases involving the incidental take of porpoise in the yellowfin tuna fishery.

In Hawaii, extensive patrol and public awareness work was again devoted to protecting the humpback whale during its calving and breeding season.

A native American residing in the State of Washington was apprehended for the unlawful possession and transportation of marine mammals. The suspect has raised the defense that Tribal Treaty rights allow the taking and utilization of marine mammals by native Americans. This case is waiting prosecution by the Department of Justice.

In Alaska, agents spent considerable effort in monitoring the bowhead whale subsistence hunt. Also, in a case still pending, an undercover operation led to the seizure of about \$10,000 worth of whale teeth and walrus tusks destined for illegal sale.

## PART II - LEGAL ACTIONS

### American Tunaboat Association v. Baldrige, (9th Circuit) Civil Number 82-5588.

In this action, the American Tunaboat Association (ATA) challenged the Administrator's refusal to follow the Administrative Law Judge's (ALJ) recommendations on three specific scientific findings in the Agency's final decision in its 1980 tuna/porpoise rulemaking held in conjunction with the ATA's application for a general permit authorizing the incidental take of porpoise during commercial purse-seine fishing for tuna. The case was brought despite the fact that the Agency's decision authorized a quota of 20,500 porpoises for each of the years 1981-1985, and a general permit covering these years was issued. The portions of the Agency's final decision challenged by the ATA were 1) whether the calculation of mean school size by the Agency should have used data obtained by agency observers aboard tuna boats, 2) whether an incorrect premise, that observers on aerial surveys could be expected to see all large porpoise schools on the trackline, was used in the agency's calculation of the density of porpoise schools, and 3) whether the area inhabited by porpoise was larger than the value used in the agency's analysis.

On March 10, 1982, the U.S. District Court for the Southern District of California entered an order declaring that the determinations of the ALJ on the three disputed matters were the best available scientific evidence within the meaning of the Act and that the Administrator should have accepted them. The Agency has appealed the decision of the district court on the grounds that the Administrator's findings were supported by the substantial expert opinion evidence in the administrative record. The case has been fully briefed and argued before the U.S. Court of Appeals for the Ninth Circuit.

Balelo v. Baldrige, (9th Cir.) Civ. No. 81-5807, 81-5806; United States v. \$50,178.80, (9th Cir.) Civ. No. 82-5433.

Balelo v. Baldrige also arises out of the 1980 tuna/porpoise rulemaking. In this class action, commercial tuna fishermen challenged the Agency's statutory and constitutional authority to promulgate the regulation (50 CFR 216.24(f)) allowing the Agency to require placement of a NMFS observer on board a tuna boat as a

condition to obtaining a certificate of inclusion. On January 5, 1983, the U.S. Court of Appeals for the Ninth Circuit invalidated the regulation as being beyond the statutory authority granted by Congress to the Secretary. The Ninth Circuit upheld the lower Court's decision by finding that observer placement constitutes a search for fourth amendment purposes, that the "plain view" doctrine does not apply in this case, and that the pervasively regulated industry exception to the warrant requirement does not apply in the absence of specific statutory authority. The Ninth Circuit went beyond the decision of the District Court by finding that the regulation was invalid for all purposes including the collection of scientific data. The lower Court had held that only the use of observer data for enforcement purposes was beyond the Agency's authority.

Balelo was consolidated for the purposes of appeal with United States v. \$50,178.50 (the "Willa G." case). In this action, the agency sought forfeiture of that portion of a vessel's catch of tuna obtained from unlawful sets made on prohibited stocks or species or porpoise. The Ninth Circuit reversed the holding of the U.S. District Court for the Central District of California and found that even observer data gathered prior to the Court's decision in Balelo must be excluded in forfeiture actions.

The Agency has petitioned for a rehearing in the Ninth Circuit in both cases.

Friends of Animals v. Baldrige (D.D.C) Civ. No. 81-1547.

In this action, Friends of Animals, Inc. sought a declaration that the 3-year permit for the incidental take of Dall's porpoise issued by NOAA under the MMPA to the Federation of Japan Salmon Fisheries Cooperation Associations is invalid. The Agency approved the permit authorizing the take of 5,500 porpoise in the course of the Japanese North Pacific high seas salmon fishing operations on May 15, 1981, and substantially accepted the findings of the ALJ. Although the Court was concerned about the adequacy of the data on which the permit was issued, the Judge upheld the permit in his decision of May 18, 1982. The Court found that although each variable that went into the ALJ's determination that the taking of 5,500 porpoise would not be to the disadvantage of the species was subject to scientific uncertainty, the scientific assumptions and estimates adopted by the ALJ were the best evidence available. Although the Court was concerned about the adequacy of the data, it held that the

decision to issue the permit was based on substantial evidence and must, therefore, be upheld even if the Court would not have reached the result that the agency did if the issue had been before the Court for determination. In an area where complex scientific judgments must be made on limited evidence, the Court held that it would not substitute its judgment for that of the agency, especially when the weight of expert opinion supported issuance of a permit.



Figure 4 - Volunteers from the California Marine Mammal Stranding Network salvage a sei whale specimen for the Los Angeles County Museum of Natural History, November 30, 1982. Photo by Dana Seagars, NMFS, Southwest Region.

### PART III - MARINE MAMMALS AND FISHERIES INTERACTIONS

When marine mammals interact with sport and commercial fisheries during fishing operations, they are sometimes killed, injured, or harassed. On the other hand, marine mammals take or damage fish caught on lines or in traps and nets; they damage fishing gear during these encounters or when they accidentally become entangled; and, sometimes, they compete with fishermen for the same fish and shellfish resources.

Before the Act, sport and bounty hunting and various forms of harassment were used to control the distribution, abundance, and behavior of marine mammals. The Act imposed a moratorium on these activities and, in recent years, animals in certain areas apparently have become more numerous and bolder in their interactions with fishermen and fishing gear. The most acute problems seem to involve seals and sea lions in several areas of Alaska, Washington, and Oregon.

The Northwest and Alaska Fisheries Center (NWAFC) is studying the incidental catch of northern sea lions by U.S. fishermen in the pollock joint venture fishery in Shelikof Strait, Alaska. Since this joint venture fishery is expanding each year, there is a need to assess the level of sea lion take and the impact of the take to local sea lion populations. As part of their broad Bering Sea research program, the NWAFC also studies the overall impact of commercial fishing on marine mammal stocks in the Bering Sea.

#### Contracts with States to Study Marine Mammal/Fisheries Problems

##### Columbia River Study

Since 1980, NMFS has contributed funds to the Washington Department of Fish and Game to study marine mammals-fisheries interactions in the Columbia River and adjacent waters. Partial support was also provided by the Columbia River Estuary Data Development Program and the Marine Mammal Commission.

After three years of study, researchers have found that marine mammal/fisheries interactions occurred in 62 percent of the salmon gillnet fishing trips in the study area (lower Columbia River, Grays Harbor, and Willapa Bay), and these interactions resulted in damage to fish catches, fishing gear, and/or marine mammals in 36 percent of all the fishing trips sampled. Harbor

seals were the primary cause of fish damage in all estuaries and seasons. The harbor seal population in the study area has increased at an annual rate of about 11 per cent between 1976 and 1982. Researchers have also found significant damage by seals to adult salmonids indicating that seals are hunting free-swimming salmonids in river channels. Not enough is known at this time to estimate the predation rate on return adult salmonids or the mortality rates of the injured salmonids that survived the seal attacks.

The State of Washington currently has a contract from NMFS to identify and evaluate the most effective methods for mitigating marine mammal/fisheries conflict in the Columbia River; this research is expected to be completed in 1983.

#### Gulf of Maine

An NMFS contract to study the extent of marine mammal-fisheries conflicts in the Gulf of Maine was awarded to the University of Maine in May 1980 and has continued through 1982. They have studied the distribution and abundance, habitat use patterns, and population discreteness of harbor seals in the Gulf as well as the degree of harassment by man. The extent and impact of all marine mammal-fisheries interactions in the Gulf is also being investigated by the University under this contract. These interactions include incidental take, subsistence take, and economic impact on fisheries, and are expected to form the basis for management decisions regarding the ability of New England fisheries to be included under the new incidental take exemption amendments to the MMPA.

#### California

Under contract to the Southwest Region and Fisheries Center, the California Department of Fish and Game (CDFG) continued to investigate marine mammal/fishery interactions and to collect data required for the assessment of the status of the harbor seal population. In 1982, efforts were directed at mitigating marine mammal/fishery interactions in the Klamath River salmon fisheries and in the Southern California charter boat fishery.



## PART IV - INTERNATIONAL PROGRAMS AND ACTIVITIES

The MMPA directed the Department of Commerce to seek to further the protection and conservation of marine mammals under existing international agreements and to take the initiative necessary to negotiate additional agreements required to achieve the purposes of the Act. The NMFS participates in many international programs and activities to carry out the intent of the Act.

### International Whaling Commission (IWC)

Cessation. At the 34th annual meeting of the International Whaling Commission held July 1982 in Brighton, England, the United States' 10-year effort to bring about a moratorium on commercial whaling was finally realized. The Commission, by a vote of 25 to 7 with five countries abstaining, adopted a commercial cessation to take effect in the 1985/86 pelagic and 1986 coastal whaling seasons. This decision was taken with the understanding that catch limits will be established during the 3-year transition period based on the recommendations of the Scientific Committee and the provisions of the current management procedures. The 3-year postponement will provide the affected countries the time necessary to cease whaling in an orderly fashion. The cessation of commercial whaling is to be reviewed by 1990 to determine its effect on whale stocks.

Although four nations, Japan, Norway, Peru, and the Soviet Union, have filed formal objections to the Commission's decision, the U.S. supports the IWC decision and the steps adopted to achieve it. Also, the affected countries have been advised that the United States will take advantage of all laws and regulations to ensure that the cessation is implemented.

Two U.S. laws have provisions that are linked to whale conservation practices of other nations. Under the Pelly Amendment to the Fishermen's Protective Act, the U.S. may embargo imports of fish products from countries whose nationals are certified by the Secretary of Commerce as conducting fishing operations (including whaling) in a manner or under circumstances that diminish the effectiveness of international conservation programs such as the IWC. The Packwood-Magnuson Amendment to the

MFCMA mandates a reduction by at least 50 percent in the allocation of fish that may be caught in the U.S. Fishery Conservation Zone by any nation that is certified by the Secretary. This issue was raised in December 1982 when Congress approved the proposed Governing International Fishery Agreement between the United States and Japan. At that time, the potential adverse impacts of Japan's objection on U.S. Japanese relations, including fishing allocations in the FCZ, was noted.

Catch Limits. Also, at the 34th annual meeting, the Commission set commercial catch limits resulting in a reduction from the 14,070 limit set at last year's meeting to 12,371 for the upcoming 1982/83 pelagic and 1983 coastal seasons. A table reflecting the newly established catch limits and the trend in catch limits is included in the Appendix.

Cold Harpoon. At the 1981 annual meeting, the Commission voted to ban using the cold harpoon to kill minke whales; the ban would become effective with the 1982/83 pelagic and the 1983 coastal seasons. Brazil, Iceland, Japan, Norway and the U.S.S.R. filed objections. There were no proposals to modify the ban at the 1982 meeting, and the Commission adopted a resolution calling on those nations to withdraw their objection. However, Japan's objection may be resolved since it is complying with the ban in its 1982/1983 pelagic operations now under way and taking steps toward full compliance in the next coastal whaling season. Also, under a bilateral agreement, NMFS has stationed an IWC observer at Japanese land whaling stations.

Aboriginal Whaling. As a result of U.S. efforts since 1979, the IWC established management principles and procedures to govern aboriginal subsistence whaling which, in the U.S., involves the take of bowhead whales by Alaska natives. The Commission established a standing subcommittee of the Technical Committee to review aboriginal subsistence whaling needs and provide information and advice to the Commission in a way similar to the Scientific Committee. Taking whales for aboriginal subsistence purposes will be allowed in 1984 and after only at levels that the IWC finds consistent with criteria set by these committees.

Antarctic Minke Whale Assessment Cruise. Intensive commercial exploitation of minke whales began in the Antarctic during the 1971-72 whaling season and continues under regulations adopted by the IWC. Since population estimates are not reliable, the IWC initiated a tagging and survey program under the auspices

of the IWC International Decade of Cetacean Research during the 1978-79 whaling season to provide a more reliable basis for management decisions. The survey, conducted from ships provided by Japan and the Soviet Union, continued during the 1982-83 whaling season and involved scientists from several countries, including the United States. Results of the assessment will be provided to the IWC's Scientific Committee and used to improve management of minke whales in the Antarctic.

#### Inter-American Tropical Tuna Commission (IATTC)

For its 1982 meeting, the IATTC staff prepared an analysis more detailed than in previous years on the estimates of total annual porpoise mortality incidental to purse seining operations. Mortality inflicted by the U.S. registered fleet between 1979 and 1981 appears to have remained relatively constant at a level of about 16,000 to 19,000 porpoises each year of which about half were offshore spotted porpoises. Estimates of mortality by the non-U.S. fleet are not reliable and will remain so until a large proportion of trips from the non-U.S. fleet can be sampled.

The Commission's efforts to sample purse seine trips from the international fleet in 1982 continued to encounter obstacles. As of October 1982, only six non-U.S. trips were completed or in progress. In addition to the difficulty of achieving full participation in the program, other problems include vessel registry transfers, internal difficulties experienced by participating nations, vessels selected for sampling, and delays in selected vessel departures due to extended unloading times. The purse seine catch of yellowfin associated with porpoise in the eastern tropical Pacific is estimated to be 38,182 short tons or 52.3 percent of the total yellowfin catch, the highest amount since 1977.

#### International North Pacific Fisheries Commission (INPFC)

During the 1982 annual meeting of the Commission, discussions on marine mammals centered on gear modifications now being developed by Japan and the need for data from the Japanese land-based salmon fleet. Currently, U.S. observers are placed aboard vessels of the Japanese mothership salmon fleet, and U.S. scientists believe that population estimates and reproductive patterns for the marine mammals, especially Dall's porpoise, taken incidentally in this fishery could be more accurate if data were

received from the land-based gillnetters as well as from motherships.

In December 1982, the U.S. Congress extended for three years the marine mammal permit by which Japanese salmon fishermen take Dall's porpoise incidentally caught in their mothership fishery. The extension carried with it requirements for gear modification, continued commitment to research, and adequate funding for research activities by Japan.

#### North Pacific Fur Seal Commission (NPFSC)

Much of the 1982 annual meeting involved a discussion on fur seal population trends and their possible causes. Perhaps the most important factor in recent changes in population is the reduced survival of young seals at sea. One of the primary causes contributing to this decline may be entanglement of fur seals in debris consisting mainly of fragments of fishing nets. However, scientists agreed that the problem of entanglement and the observed declines in pup production are not related to the harvest of sub-adult males, and, therefore, no change in the existing harvest regime was proposed. The Commission agreed to write to all countries fishing in the North Pacific to alert them to the problem of entanglement. In addition, the Commission reviewed its scientific research program and harvest levels for the Soviet Union and the United States.

#### US-USSR Marine Mammal Project, Environmental Protection Agreement

The objective of this project is to promote joint research and exchange of information by U.S. and Soviet scientists on the biology, ecology and population dynamics of marine mammals of concern to both countries. In 1982, nine American and six Soviet scientists took part in exchanges for field or laboratory studies or research cruises on ships of the other country.

In January and February 1982, two Soviet scientists participated in studies on non-metrical characteristics of small cetaceans at the NMFS Southwest Fisheries Center, La Jolla, Calif. and Hubbs-Sea World Research Institute, San Diego, Calif.

In April and May, two Soviet scientists worked with Alaska Department of Fish and Game scientists to investigate lair selection ecology among ringed seals.

A comprehensive and successful joint cruise investigating bowhead whale distribution and walrus herd composition was undertaken during July and August in the Chukchi Sea. Six American scientists joined their Soviet counterparts on the Soviet whale catcher boat KS ENTUZIAST. While no bowhead whales were encountered (four recorded, but believed to be misidentifications), age and sex composition data were obtained on numerous herds of walrus along the ice edge in the northern and western Chukchi Sea.

Also during July and August, two Soviet scientists participated in a U.S. cruise on the NOAA R/V DAVID STARR JORDAN (working with scientists from the NMFS Southwest Fisheries Center) in the eastern tropical Pacific. The cruise, working between Hawaii and San Diego, tested methods to improve precision of calculating positions of dolphins schools in relation to survey vessels, studied distribution and abundance of coastal cetaceans and examined the feasibility of using color patterns to differentiate stocks.

In September, a U.S. scientist worked on marine mammal parasites with Soviet colleagues at Simferopol University in the Ukraine, U.S.S.R. Their work proved extremely productive and they are preparing a monograph of parasites of marine mammals of the Northern Hemisphere. The study will take at least two years and probably involve a return visit by Soviet scientists to the United States.

During October and November, two U.S. scientists worked on biology and taxonomy of seals and walrus using osteological specimens at the Soviet TINRO Laboratory at Magadan. Their work included a short cruise to observe marine mammals in the northern part of the Okhotsk Sea and extensive discussions on aerial and shipboard survey methodology.



Figure 5 - Scientists attach a radio tag to the fur of a harbor seal on San Miguel Island, Calif. The tag will fall off when the animal undergoes its annual molt. Photo by Dana Seagars, NMFS, Southwest Region.

## PART V - MANAGEMENT AND RESEARCH PROGRAMS

### Cetaceans

#### Bowhead Whale

##### Management

Under the MMPA, Alaska natives are allowed to hunt the endangered bowhead whale for subsistence purposes. However, since the United States follows the quota restrictions set by the IWC for this species, regulations managing the hunt are implemented under the Whaling Convention Act of 1949.

For 1981 through 1983, the IWC set an overall quota of 45 bowhead whales landed or 65 struck with no more than 17 to be landed in any one year. In 1981, NOAA and the Alaska Eskimo Whaling Commission (AEWC) concluded a cooperative agreement regarding management of bowhead whale subsistence hunting during 1981 and 1982; this agreement has been extended through 1987. In February 1982, the NMFS Regional Director in Alaska negotiated an amendment to the agreement concerning the management, inspection, and reporting of bowhead whale subsistence harvests. The cooperative agreement established a strike limit for 1982 of 19 whales and provided for civil penalties in the event more than 16 whales were landed. A quota of 18 strikes has been agreed to for the 1983 season.

The Eskimos reached the 1982 strike quota during fall hunting at Kaktovik and Nuiqsut where two of three whales struck were landed bringing the annual totals to eight landed and eleven struck but lost. During the spring hunt, NMFS agents were based in Gambell/Savoonga, Point Hope and Barrow, and, during the fall hunting, they were in Kaktovik and Barrow. For the first time since 1959, no whales were landed in Barrow.

TABLE 2. Annual Quotas and Catch of Bowhead Whales 1978-1982

	Quota <sup>1</sup>		Actual Take		strikes
	Landed	Strikes	Landed	lost	
1978	14	20	12	6	18
1979	18	27	12	15	27
1980	18	26	16	18	34
1981 <sup>2</sup>	17	32	17	11	28
1982	16	19	8	11	19
1983		18			

The State of Alaska, the Alaska Eskimo Whaling Commission, the North Slope Borough, the oil and gas industry, NMFS, and the Department of Interior (DOI) have interests and responsibilities in protecting bowhead whales. Although NMFS has lead-agency responsibility under both the Marine Mammal Protection Act and the Endangered Species Act and is responsible for carrying out studies of the bowhead whale population, the DOI is responsible for developing information needed to assess and mitigate any possible adverse impacts of OCS activities on the bowhead and its habitat.

#### Research

NMFS's bowhead whale research program is carried out at its National Marine Mammal Laboratory (NMML). The 1982 spring bowhead whale census was conducted April 11 through June 2. The North Slope Borough, with the assistance of the NMML, made the census and collected biological specimens.

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<sup>1</sup>. Quotas were first set for this population in 1978. A landed whale counts as a strike. Hunting is to cease when either the landed quota is reached or when the quota of total strikes is reached.

<sup>2</sup>. Based on IWC quotas, totals for 1981, 1982, 1983 combined cannot exceed 45 landed or 65 struck.



Analysis of four years of data collected from 1978 to 1981 indicated that the revised best minimum estimate of current population size is between 3,857 (range 3,390 to 4,325). Results of the spring 1982 census and autumn 1981 census sponsored by the oil industry also suggest that the population size is near 4,000 animals.

Research on ageing, by using biochemical methods to study eye lens nuclei and laminations of the tympanic bullae ("ear bone") continues. Preliminary analysis indicates that female bowheads become sexually mature when they are about 46 feet long, gestation may last 13 months, females give birth every 3 to 5 years, and conception and calving occur primarily in the spring.

### Gray Whale

#### Management

The population of the gray whale expanded to a point where the animal was removed from the IWC's "protected" status in 1978. However, the continued increase in its population may be adversely affected by such human activities as whale-watching and oil and gas development. This animal, which continues to be listed as endangered under the Endangered Species Act, migrates along the West Coast and winters in the lagoons of Baja, California where it calves and breeds and spends summers in Arctic waters feeding.

Guidelines for gray whale watching along the California coast were included in a press release issued by the Southwest Region and the Southwest Fisheries Center prior to migration season. Posters were also distributed to marinas, yacht clubs, and whale watching groups.

#### Research

The 3-year census of gray whales in Unimak Pass, Alaska has been completed. Also, studies on the feeding, ecology, migration, and distribution of these populations in Alaska have been completed. The results of both studies will be included in a book about gray whales.



Figure 6 - Three humpback whales, known locally as Salt, Snake-eyes, and Lightning, cooperatively feed for sand lance on Stellwagen Bank off Gloucester, Mass. Photo by Mason Weinrich, Cetacean Research Unit, Gloucester Fishermen's Museum.

## Humpback Whale

### Management

Of special concern to NMFS is the North Pacific population of humpback whales which includes only about 1,000 animals. In the summer, a portion of this stock spends time in Glacier Bay National Park and other areas in southeast Alaska. Most of the North Pacific population winters in the waters around the main islands of Hawaii. Activities in both areas, including commercial and recreational vessel traffic, offshore oil and gas development, sport and commercial fisheries, and coastal development, present threats to this species.

In Hawaii, the concerns for the species are related to whale-watching activities; the effects of operating an inter-island hydrofoil service through humpback whale habitats; criteria for determining activities which constitute harassment; and the need to educate boat and aircraft operators about humpback whales. In response to problems created by whale watching, the NMFS Southwest Region issued a Notice of Interpretation in 1979 for the "taking by harassment" of humpback whales in the Hawaiian Islands. This notice continues to be in effect. In addition, a brochure that explains what harassment means is continually distributed to private boaters, whale watchers, airlines serving Maui, and the general public. Special agents were assigned temporary duty in Hawaii to help enforcement efforts and increase public awareness through increased public contact. These efforts also have been aided by the operation of a NMFS patrol vessel. The number of complaints of alleged harassment of humpback whales declined in the 1981-82 season. This may be due to a better understanding by whale watchers and the public about activities that harass humpback whales. The NMFS will continue to place special emphasis on monitoring research activities.

The Western Pacific Program Office assisted in the Section 7 consultation process concerning humpback whales under the Endangered Species Act. Federal agencies in consultation with NMFS reviewed their activities to ensure that they would not jeopardize the continued existence of humpback whales. During these consultations, we provided recommendations that would help Federal agencies meet their obligations under the ESA.

In Alaska, 20 to 25 humpback whales were observed each year in Glacier Bay National Park; however, the number of whales and the length of time spent in the Bay dropped in 1978 and 1979. The National Park Service determined that increasing vessel traffic might have been partially responsible for this situation and established emergency regulations to restrict vessel traffic. In 1981, Congress appropriated special funds to the National Park Service to address the problem, and the Service transferred the funds to NMFS to carry out the studies.

### Research

The 1982 field studies on Glacier Bay humpback whales were completed in September. The NMFS Auke Bay Laboratory, which is conducting a prey distribution and abundance study, is analyzing acoustic survey data at the NMML in Seattle and fish/zooplankton sampling data in Auke Bay, Alaska. Behavior data, focusing on whales' responses to vessels, are being analyzed by a University of Hawaii contract study team in Honolulu. This analysis includes acoustic monitoring data collected during the field season by an acoustic engineering consultant and radio tracking data collected by a team of biologists from the University of Hawaii, NMML, and Woods Hole Oceanographic Institution.

At a meeting held at the NMML in December 1982, contractors compared preliminary findings and discussed joint analysis. Ongoing projects at the NMML on humpback whales include collection and analysis of sightings data from the Platforms of Opportunity Program; photographic identification of whales to provide information on distribution, abundance, and movements; and literature review of humpback whale feeding habits and behavior.

### North Atlantic Cetaceans

#### Management

The NMFS Northeast Region reviewed the data regarding the distribution and abundance of large endangered species that inhabit the U.S. east coast from Cape Hatteras, N. Carolina to the U.S./Canadian border. Most of the data is the result of three years of survey effort carried out by the Cetacean Turtle Assessment Program (CETAP). The University of Rhode Island, under contract from the Bureau of Land Management completed its work and submitted a final report in December 1982.

The Region has used the CETAP Reports, along with data from other research programs, to assess the potential impacts of oil and gas leasing exploration activities on the Mid and North Atlantic Outer Continental Shelf (OCS) under the consultation and review provisions of the Endangered Species Act and National Environmental Policy Act. Also, data has been collected and assimilated on the inshore bank areas (Stellwagen Bank in particular) to assess the potential affects of human activities on the ecosystem that supports the summer concentrations of large baleen whales on these banks. The CETAP data have shown significant concentrations of cetaceans in the Gulf of Maine, Georges Bank and Mid-Atlantic areas. The data also included descriptions of their behavior patterns.

The CETAP data show heavy use of the inshore banks along the southern edge of the Gulf of Maine (Jeffrey's Ledge, Stellwagen Bank and Provincetown Slope) by humpback and fin whales from spring until fall. The data also suggest that the Great South Channel, a bathymetric feature resembling a funnel located between Georges Bank and Cape Cod, is used by many large cetaceans as they migrate to and from the Gulf of Maine.

The data show concentrations of sperm whales, pilot whales, bottlenose dolphins and various pelagic dolphins along the 1,000 meter contour from Cape Hatteras north to the southern margin of Georges Bank.

The New England Aquarium, under contract to the NMFS and the World Wildlife Fund, has described the repeated use of the lower Bay of Fundy (near Grand Manan Island) by the severely depleted North Atlantic right whale. For three successive years, these surveys have revealed several cow/calf pairs using this region from July through September. Right whale mating behavior has also been consistently observed in the lower Bay of Fundy in the summer and fall.

### Research

The CETAP surveys represent the first major effort to gather information on all cetaceans found on the Northeast Region's continental shelf. The final report of the 3-year program will serve as a baseline characterization of cetacean distribution, abundance, and movement patterns in the western North Atlantic.

The NMFS has funded several research studies not covered by CETAP including the following:

- o A continuing study to determine the abundance, movement patterns, habitat usage, and the human-related pressures on the population of harbor seals in the Gulf of Maine.
- o A characterization of habitat and distribution, an estimate of population size, and an assessment of the impact of human activities on the harbor porpoise in the Gulf of Maine.
- o A continuing study on the distribution and abundance of the North Atlantic right whale in the Lower Bay of Fundy.
- o Special studies on the behavior of humpback whales and their use of the Cape Cod Bay/Stellwagen Bank area and the Mona Passage, Puerto Rico.

### Bottlenose Dolphins

#### Management

The popularity of the bottlenose dolphin for public display prompted the Marine Mammal Commission to recommend that NMFS set an annual quota for the number of animals authorized to be removed from populations in the Southeast Region for scientific research and public display. The number removed during any calendar year cannot exceed two percent of the minimum population in a specific location.

The Southeast Region regulates the taking under permits; all permit holders authorized to take dolphins from the region are required to consult with the Regional Director about specific locations of take. At this time, taking is authorized only from the areas where quotas have been set and only until these quotas are reached. Also, current permits do not allow dolphins less than 6.5 feet long to be taken.

Table 3. - Annual Quotas - Atlantic Bottlenose Dolphins

<u>Quota</u>	<u>Area</u>
6 . .	Florida East Coast, Indian/Banana River Complex
23 . .	West Coast of Florida, Charlotte Harbor north to Crystal River, divided into three sub-regions as follows
	10 - Tampa Bay
	5 - Charlotte Harbor
	8 - North of Charlotte Harbor to Crystal River (not including Tampa Bay)
10 . .	Florida Panhandle, Crystal River to Mobile Bay, with the following limitations:
	1 - Apalachicola/St. Joseph Bay
	2 - Destin/Fort Walton Beach
35 . .	Mississippi Sound
17 . .	Texas Coast, north of Corpus Christi Bay up to and including Matagorda Bay divided into two sub-regions as follows:
	5 - Aransas/Copano/San Antonio Bay Complex
	12 - Matagorda Bay

#### Research

The Southeast Fisheries Center, through its laboratories in Florida, North Carolina, and Mississippi, continues to assess the population of the bottlenose dolphin. The goals of the research on bottlenose dolphins are (1) to provide estimates of the abundance and live-capture quota recommendations for the stock(s) of this species occurring in southeastern U.S. jurisdictional waters; (2) to determine the dynamics and discreteness of along-shore and inshore-offshore populations; and (3) to determine the validity of the 2 percent live-capture quota rule recommended by the Marine Mammal Commission.

At the Mississippi Laboratory, research involved studies on the use of cryogenic branding to examine herd associations and to determine the discreteness of localized populations of bottlenose dolphins. Also, aerial surveys were made of discrete and localized inshore geographical areas to develop the data base needed to estimate abundance in priority locations.

At the Miami Laboratory, research focused on estimating abundance and establishing live-capture quota recommendations,

conducting aerial sampling surveys that allow for region-wide abundance estimates, estimating vital rate parameters to allow evaluation of the 2 percent quota rule, and examining the degree of genetic variability between along-shore and inshore-offshore populations.

The Beaufort Laboratory evaluated the potential effects of commercial fishing, industrial development, population growth, and recreational activities on this species.

In addition to research in the southeastern coastal areas, the Southwest Fisheries Center's La Jolla Laboratory has initiated population studies of the southern California coastal bottlenose dolphin to determine its population size, movement, range, herd composition, and reproductive rate. Boat surveys and land-based surveys are continuing, and aerial surveys and acoustic monitoring began in 1982. Preliminary work indicates that some dolphins may be permanent residents of certain areas along the San Diego County coast. There appears to be a seasonal fluctuation in numbers of dolphins and herd size with the greatest numbers occurring in July and November and the largest herds in February and July.

In 1982, an aerial survey made of bottlenose dolphins along the California coast from the U.S.-Mexico border to off Los Angeles resulted in the sighting of 100 bottlenose dolphins. Animals were observed about 15 miles further north than had been reported previously.



## Porpoise\* and Commercial Fishing Operations

### Porpoise and the Tuna Purse-Seine Fishery

#### Management

Regulations issued by NMFS in 1980 allow the U.S. purse-seine fishery for yellowfin tuna in the eastern tropical Pacific to take incidentally 20,500 porpoises each year from 1981 through 1985. A general permit to take porpoises in compliance with final regulations and quotas was issued to the American Tunaboat Association. Preliminary estimates indicate that 23,608 porpoises were killed during the 1982 fishery. Of the estimated porpoise mortality for 1982, 20,847, were taken from species or stocks for which quotas were allocated; 108 were from species or stocks for which quotas had not been set; 547 were unidentified animals which have not yet been assigned to categories; and 2,106 were eastern spinner dolphins which are considered depleted and only limited accidental taking is permitted.

NMFS places observers on board tunaboats to gather information on the number of porpoises taken incidentally in this fishery and to gather scientific information. In 1982, NMFS placed observers on 32 cruises aboard U.S. flag vessels and 40 additional trips were made aboard U.S. vessels in cooperation with the Inter-American Tropical Tuna Commission. NMFS also made 86 porpoise safety gear inspections on vessels in San Diego, Calif. and Panama City, Panama to make sure they were complying with U.S. regulations. The Region held operator workshops for 16 skippers of tuna seiners. At this time, 141 operators hold Certificates of Inclusion under the general permit.

Two lawsuits, the American Tunaboat Association v. Baldrige and Balelo v. Baldrige, affect the agency's ability to manage the incidental take of porpoises in this fishery. Both cases are discussed in the Legal Actions section of this report.

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\*NMFS uses the term porpoise, rather than dolphin, to prevent confusion with the dolphin fish, an object of sport and commercial fishing. The common name is used when discussing individual species or stocks, such as an eastern spinner dolphin.

Table 4. Total incidental porpoise mortality and serious injury for U.S. and Non-U.S. vessels, 1971-1982

<u>Year</u>	<u>U.S. Vessels</u>	<u>Non U.S. Vessels</u>	<u>Total</u>
1971	246,213	15,715	261,920
1972	368,600	55,078	423,600
1973	206,697	58,276	264,900
1974	147,437	27,245	174,680
1975	166,645	27,812	194,450
1976	108,740 (quota-78,000)	19,482	128,220
1977	25,452 (quota-62,429)	25,901	51,350
1978	19,366 (quota-51,945)	11,147	30,510
1979	17,938 (quota-41,610)	6,837	24,770
1980	15,000 (quota-31,150)	27,000	42,000
1981	19,000 (quota-20,500)		
1982	23,608 (quota-20,500)		

#### Research

The Southwest Fisheries Center is responsible for research on porpoises involved in the U.S. tuna purse-seine fishery. Since 1971, it has carried out a series of studies directed at the population biology of spotted and spinner dolphins. Highlights for 1982 include biological studies, completion of a survey to census dolphins along 10° N latitude, and development of techniques to improve the precision of estimates of population parameters.

The primary objective of this research is to provide the best possible determinations of the status of affected porpoise stocks by 1985 when regulations for 1986 and beyond will be considered. Biological studies included delineation of dolphin stocks, age determination, and analysis of reproduction. Two new methods are being investigated for delineating stocks: a nonmetrical technique using skull characteristics is being developed in cooperation with U.S.S.R. scientists and a DNA technique that allows examination of the degree of relatedness among dolphins from different areas is being tested. Preparation for readings of the age of 1,800 samples of spotted dolphin teeth were completed and analysis of the data is underway to determine growth and age-specific reproductive rates.

From May to August 1982, the NOAA research vessel, David Starr Jordan, surveyed an area of the eastern tropical Pacific to count dolphins. The survey was concentrated on 10° N latitude, and 342 marine mammal schools were sighted.

A computerized tracking system developed to improve precision of sighting angles and location of marine mammal schools on vessel surveys was tested for the first time during the Jordan cruise. In the past, researchers had to rely on manual techniques for calculating positions of dolphin schools in relation to the research vessel. The new tracking system uses a computer which is rigged to specially mounted, high-powered (25x) binoculars and gyrocompass. Observers use the binoculars to sight schools of dolphins, and the computer records the position of the schools in relation to the line along which the ship is moving. Using the angle between the ship's line of travel and the position of the dolphins, and taking into account the swimming speed of the dolphins and the movement of the vessel, the computer can calculate the distance of the school from the ship and eliminate any potential distortion in the sighting data caused by the movement of the ship. This information is used to estimate the density of dolphins in a given geographical area.

## Dall's Porpoise and the Japanese Salmon Fishery

### Management

Under a permit issued by NMFS, the Japanese salmon mothership fishery is permitted to take 5,500 Dall's porpoise annually inside the U.S. Fishery Conservation Zone (FCZ). Based on our estimates, the total take in 1982 was 4,187 inside the FCZ. Marine mammals, primarily the Dall's porpoise, are taken during commercial gillnet operations by Japanese fishing vessels, both in and out of the U.S. Fishery Conservation Zone, in the North Pacific Ocean and Bering Sea.

In 1982, NMFS continued to monitor the incidental take by the Japanese. U.S. observers were aboard catcherboats while the mothership fleets operated inside the U.S. FCZ, and observers from the Japan Fisheries Agency were aboard catcherboats both inside and outside the U.S. FCZ. Observers collected data on the dropout rate of salmon during gillnet operations and on seabird entanglements. A cooperative research program with the U.S. Fish and Wildlife Service on the incidental take of seabirds during this fishery was implemented in 1982 and will continue in 1983.

## Research

In May 1982, NMFS issued a scientific research permit to its Northwest and Alaska Fisheries Center to take by killing up to 640 adult and 320 young Dall's porpoise over a five-year period. However, U.S. participation in the 1982 research cruise to collect this information was cancelled due to public opposition against the killing of porpoises. This cancellation occurred even though the method of taking was judged to meet the criteria of humaneness under the Marine Mammal Protection Act and was judged necessary to conduct needed research on the reproduction of the species. A deficiency in the data was recognized by an Administrative Law Judge in the 1981 general permit hearing to allow the Japanese salmon fishery to take marine mammals inside the U.S. FCZ.

To resolve this problem, Congress amended the North Pacific Fisheries Act in December 1982 and extended the permit through June 1987. Extension of the permit is based on requirements such as Japan's continued commitment to research, installation of gear modifications, and adequate funding for research. Without this extension, the permit would have expired after the 1983 season, and the data needed to establish quotas for the new permit might not have been available. The amendments call for NMFS to develop annual action plans relating to monitoring and research and development.

Although a portion of the NMML's research plans for Dall's porpoise could not be carried out in 1982, other research continued under the U.S.-Japan cooperative research program initiated in 1978 under the U.S.-Japan Memorandum of Understanding (MOU) and MMPA permit. During surveys made by U.S. biologists and Japanese nationals on Japanese salmon research vessels, Dall's porpoise was the most frequently sighted and most abundant species. Inside the FCZ, a U.S. biologist was on board each of the Japanese salmon motherships to collect biological samples and data from all incidentally taken marine mammals returned to the motherships. Japanese nationals collected samples from porpoises taken north of the FCZ.

## Platforms of Opportunity Program - Cetaceans

Since 1971, the Northwest and Alaska Fisheries Center has been collecting marine mammal sightings from a number of sources under the auspices of the Platforms of Opportunity Program

(POP). These sightings are contributed by NOAA and Coast Guard vessels, U.S. Forest Service naturalists aboard Alaska state ferries, private fishing vessels, U.S. observers aboard foreign fishing vessels, and numerous biologists and boaters.

NOAA's Outer Continental Shelf Environmental Assessment Program (OCSEAP) contracted the NMML to analyze backlogged 1978-1980 POP sightings. A report to OCSEAP which describes distribution of marine mammals in the Gulf of Alaska and defines distributional limits for all species found in this area has been completed.

In the past year, there have been many requests for POP data. The U.S. Fish and Wildlife Service has used this data as part of its Bristol Bay Cooperative Management Program. The U.S. Forest Service has used humpback whale sightings in a report on humpback distribution in the vicinity of Ketchikan, Alaska. Also, the data base for northern right whale sightings in the eastern North Pacific has been included in a paper on right whale distribution prepared for the Scientific Committee of the IWC.

## Pinnipeds

### Hawaiian Monk Seal

#### Management

A final Recovery Plan for the endangered Hawaiian monk seal was made available in April 1983. The Hawaiian monk seal is listed as depleted under the MMPA and endangered under the Endangered Species Act which requires a Recovery Plan for certain species. In 1980, NMFS issued a draft environmental impact statement that evaluated alternatives for designating a portion of the seal's range in Hawaii as critical habitat. NMFS is in the process of developing a final decision concerning critical habitat.

Under a contract from NMFS, the Center for Environmental Education developed and published a poster and brochure depicting the biology of the Hawaiian monk seal. These were made available to the public in early 1983.

## Research

A long-term cooperative study of Hawaiian monk seal biology was started in 1976 by biologists at the Northwest and Alaska Fisheries Center; the National Bird and Mammal Laboratory, Fish and Wildlife Service; and contract researchers of the Marine Mammal Commission. From 1977 to 1980, surveys were made of the status and trends of the population, and a population and behavioral study was made at Laysan Island, a small northern island of the Hawaiian archipelago. Prior censuses indicated most island populations have decreased 50 percent on the average since the late 1950's. Monk seal populations at Kure Atoll, Midway Islands, and Pearl and Hermes Reef declined 70 to 90 percent in the same period. Lisianski and Laysan Island populations have declined 50 to 60 percent while monk seal populations at French Frigate Shoals and Necker Island increased during this time.

The Honolulu Laboratory of the Southwest Fisheries Center directs monk seal research for the NMFS. In 1981, a monk seal female-pup captive maintenance project was initiated to help determine the cause of pup disappearance at Kure Atoll and to enhance pup survival. As a result of this project, the survival of these pups has increased through their first summer. In December, 1982 seven of the eight pups that had been captive reared in 1981 and 1982 were being resighted regularly at Kure.

At Lisianski Island, all seals were identified by natural scars or bleach marks, and censuses were conducted every other day. These data are being used to develop a model of haulout patterns for the population and to test various population assessment and monitoring techniques. The effect of flipper tagging weaned pups on their temporal and spatial hauling patterns and behavior was also tested. Four pups were found entangled in discarded fishing gear at Lisianski indicating this may be a significant problem to young seals.

Depth-of-dive recorders and radio transmitters were placed on adult seals and a few immature seals at Lisianski. The younger seals were found to dive deeper and be absent from the island longer than the adults.

The French Frigate Shoals' population was monitored monthly by aerial photographic techniques and weekly visits to a few of the islands. Inter-island movement of seals at the Shoals and the



Figure 7 - A California sea lion pup on San Clemente Island, Calif.  
Photo by Dana Seagars, NMFS, Southwest Region.

increasing use of Tern Island by monk seals were monitored. By identifying individuals, the minimum numbers of immature seals and adult females at Kure were determined.

Analysis of over 2,000 scats has been completed. The total number of pups born in 1982 throughout the monk seal range was estimated at 193.

## California Coastal Pinniped Program

### Management

The legislation that established the Channel Islands National Park instructed the Departments of Interior and Commerce to cooperate in the development of a Natural Resources Study and in the aspects of the Park planning processes which pertain to marine mammals. The Southwest Region and the Southwest Fisheries Center are developing management and research plans for pinniped populations in the Park in consultation with the National Park Service, the State of California, and the Office of Coastal Zone Management. This cooperative effort will continue for a minimum ten year period (1980-1990) as mandated by the legislation. A report on the status of the pinniped populations in the Park, including a discussion of population dynamics, management concerns, and information needs, was updated and included in the National Park Service's first report to Congress on the status of the natural resources in the Park.

### Research

The population biology and ecology of coastal marine mammal stocks of California are being investigated by the Southwest Fisheries Center. Research has been directed primarily at California sea lions and harbor seals. Mark and recapture experiments and census surveys of sea lions were continued on the California Channel Islands to assess pup production and survival, pregnancy rates, and the animals' fidelity to their pupping areas. Analysis of preliminary data collected on California sea lion pup production indicates that the population in the Channel Islands is increasing, but the rate of increase is declining.

Studies on harbor seals continued and, in 1982, 10 harbor seals were radio-tagged on San Nicolas Island, 19 were radio-tagged on San Miguel Island and 12 were radio-tagged on the



Klamath River. One animal tagged on San Nicolas Island was observed about 6 months later on San Miguel Island. These studies are designed to evaluate movement patterns and the animals' fidelity to pupping sites. Surveys were made to obtain information on population abundance, growth, and size.

Additional research on pinnipeds of California was carried out by the NMML in cooperation with the Southwest Fisheries Center and the Channel Islands National Park. Studies of competition for space and food included research on the nursing cycles and feeding behavior of female northern fur seals and California sea lions. Depth-of-dive recorders and radio transmitters were attached to females of both species which were released and allowed to go to sea. The instrument packages were recovered when the females returned to land to nurse.

The two colonies of northern fur seals at San Miguel Island produced a total of 1,709 pups during 1982, an 11 percent increase over 1981. Pup mortality on land was 5 percent during 1982 representing a substantial decrease from the 21 percent pup mortality recorded in 1981. Nursing cycles from birth to weaning for 48 naturally marked northern fur seal females were recorded. Females and pups associated an average 142 days (range 101-180). Female foraging trips at sea averaged 8.7 days interspersed with stays on land to nurse the pup which averaged 1.8 days.

Also, the Southwest Fisheries Center has received funds from the Marine Mammal Commission to computerize data on elephant seals on the northern California Farallon Islands. Since northern elephant seals, California sea lions, and harbor seals have recently reestablished breeding populations on the Farallon Islands, there was an opportunity to determine how populations interact and reestablish themselves after depletion, and to gain valuable insight into the demography and dynamics of pinniped populations in general. From 1974 through 1982, a substantial amount of data, particularly on the northern elephant seal population, was acquired. The funds will be used to organize the data, develop the necessary computer programs, and enter the data into the computer.

In addition, aerial surveys were conducted to determine the total number of harbor seals hauled out along the coast of California. These surveys are part of an effort to establish an index against which the status of the harbor seal population can

be measured. The results of these studies should provide the information and management techniques necessary to allow the State of California to acquire management authority for the several species of pinnipeds in which they have expressed an interest.

## Northern Fur Seals in Alaska

### Management

Under the Fur Seal Act, NMFS is responsible for managing the annual commercial harvest of northern fur seals on the Pribilof Islands in Alaska. The U.S. government employs Aleut residents of the Islands to harvest the seals. During the 1982 5-week commercial harvest on St. Paul Island, 24,730 male fur seals were taken. The moratorium on commercial harvest on St. George Island continued into its tenth year although a subsistence harvest of 350 seals took place in July and August.

### Research

The population of fur seals in the Pribilof Islands is declining at the rate of 5 to 8 percent per year. Studies indicate that entanglement with debris, such as trawl nets, may be a primary factor in this decline. Studies of the objects found on entangled fur seals indicate that up to 5 to 10 percent of the population may become entangled each year.

Biological information collected by the NMML on fur seals of the Pribilof Islands of St. Paul and St. George in 1982 included determining the age of fur seals harvested, the number of adult males on the rookeries and hauling grounds, and the number of pups and older seals that died on the rookeries and adjacent beaches. In 1982, a total of 203,581 pups were born on St. Paul. This information is included in a NWAFC Technical Memorandum, Fur Seal Investigations, 1982.

A major effort was made to repeat baseline data on behavior collected at St. George Island in 1974 immediately after the end of harvesting. Also, the size of the herds was monitored. Final data were obtained on the diving behavior of female fur seals and a final experiment on estrus was completed. Radioactive tracers were used to study the energy used to obtain food, the production of milk, and growth rate of young seals. Newborns were tagged to provide known-age subjects for future studies.

An updated report on fur seal dietary habits based on the principal prey species of fur seals and the relative abundance of the fish-squid resources of California and in the eastern Bering Sea was completed. The basic conclusion remains that opportunistic feeding by fur seals on the most abundant available species prevails throughout the fur seal's range in the eastern Pacific Ocean and the eastern Bering Sea.

#### North Atlantic Pinnipeds

##### Research

The NMFS has continued to fund a study by the University of Maine on the abundance, distribution, and habitat use patterns of the harbor seal in the Gulf of Maine. When complete, this comprehensive tagging and aerial census effort will provide baseline data concerning the species.

The NMFS also funded a harbor seal radio-tracking study in Cape Cod Bay, Mass. to better understand the movement patterns of harbor seals wintering in the area.

TABLE 1 - 1982 GENERAL PERMIT - COMMERCIAL FISHING INCIDENTAL TAKE

	PINNIPEDIA				CETACEA		TOTAL
	<u>Otariidae</u>		<u>Phocidae</u>				
	Applied for	Allowed	Applied for	Allowed	Applied for	Allowed	
Category 1: Towed or Dragged Gear	350	350	250	250	0	0	600
DOMESTIC (PCFFA)	20	20	21	21	1	1	42
JAPAN (Deep Sea)	10	10	0	0	2	2	12
JAPAN (Medium)	24	24	24	24	15	15	63
POLAND (GRYF) *	45	25	45	25	28	15	180
POLAND (ODRA) *	48	25	48	25	30	15	126
POLAND (Dalmor) *	0	0	20	20	20	20	40
SPAIN (ANAVAR)	60	10	60	10	60	10	118
WEST GERMANY	8	8	8	8	8	8	24
BULGARIA							
REPUBLIC OF KOREA	100	50	100	50	50	8	250
Subtotal	665	522	576	433	214	94	1,049
Category 3: Encircling Gear, Not Involving Intentional Taking	300	300	400	400	40	40	740
Subtotal	300	300	400	400	40	40	740
Category 4: Stationary Gear	40	40	50	50	0	0	90
Subtotal	40	40	50	50	0	0	90
Category 5: Other Gear	450	450	600	600	40	40	1,090
DOMESTIC (PCFFA)	0	0	0	0	0	0	0
JAPAN (longline)	475	475	0	0	5,600	5,500	6,075
JAPAN (gillnet)	925	925	600	600	5,640	5,540	7,165
Subtotal	925	925	600	600	5,640	5,540	7,065

\* General Permits not issued on account of failure to secure 1982 fishing permit.

TABLE 2- 1983 GENERAL PERMIT - COMMERCIAL FISHING INCIDENTAL TAKE

	PINNIPEDIA				CETACEA				TOTAL
	Otaridae		Phocidae						
	Applied for	Allowed	Applied for	Allowed	Applied for	Allowed	Applied for	Allowed	
Category 1: Towed or Dragged Gear	350	350	250	250	0	0	600	600	
DOMESTIC (PCFFA)	130	110	15	15	20	4	165	129	
JAPAN (Deep Sea)	60	60	5	5	0	0	65	65	
JAPAN (Medium)	0	0	20	20	20	20	40	40	
SPAIN (ANAVAR)	60	30	60	10	60	5	100	45	
WEST GERMANY									
GERMAN DEMOCRATIC REPUBLIC	0	0	8	8	8	4	16	12	
REPUBLIC OF KOREA	100	100	100	50	50	5	250	155	
Subtotal	700	650	458	358	158	38	1,316	1,046	
Category 3: DOMESTIC (PCFFA) Encircling Gear, Not Involving Intentional Taking Subtotal	300	300	400	400	40	40	740	740	
Category 4: Stationary Gear Subtotal	40	40	50	50	0	0	90	90	
Category 5: Other Gear Subtotal	450	450	600	600	40	40	1,090	1,090	
DOMESTIC (PCFFA)	0	0	0	0	0	0	0	0	
JAPAN (longline)	475	475	0	0	5,600	5,500	6,075	5,975	
JAPAN (gillnet)	925	925	600	600	5,640	5,540	7,165	7,065	

TABLE 3

COMMON AND SCIENTIFIC NAMES OF MARINE MAMMALS INVOLVED IN  
SCIENTIFIC RESEARCH/PUBLIC DISPLAY PERMIT APPLICATIONS

## CETACEANS

COMMON NAME -----	SCIENTIFIC NAME -----
ATLANTIC BOTTLENOSE DOLPHIN	TURSIOPS TRUNCATUS
ATLANTIC SPOTTED DOLPHIN	STENELLA PLAGIODON
ATLANTIC WHITE-SIDED DOLPHIN	LAGENORHYNCHUS ACUTUS
BAIRD'S BEAKED WHALE	BERARDIUS BAIRDII
BLACK RIGHT WHALE, NORTHERN RIGHT	BALAENA GLACIALIS
BLAINVILLE'S BEAKED WHALE	MESOPLODON DENSIROSTRIS
BLUE WHALE	BALAENOPTERA MUSCULUS
BOTTLENOSE DOLPHINS	TURSIOPS SP.
BOTTLENOSE WHALES	HYPEROODON SP.
BOWHEAD WHALE	BALAENA MYSTICETUS
BRYDE'S WHALE	BALAENOPTERA EDENI
COMMERSON'S DOLPHIN	CEPHALORHYNCHUS COMMERSONII
COMMON DOLPHIN	DELPHINUS DELPHIS
CUVIER'S BEAKED WHALE	ZIPHIUS CAVIROSTRIS
DALL'S PORPOISE	PHOCOENOIDES DALLI
DUSKY DOLPHIN	LAGENORHYNCHUS OBSCURUS
DWARF SPERM WHALE	KOGIA SIMUS
FALSE KILLER WHALE	PSEUDORCA CRASSIDENS
FIN WHALE, FINBACK	BALAENOPTERA PHYSALUS
FINLESS PORPOISE	NEOPHOCAENA PHOCAENOIDES
FRASER'S (SARAWAK) DOLPHIN	LAGENODELPHIS HOSEI
GINKGO-TOOTHED BEAKED WHALE	MESOPLODON GINKGODENS
GRAY WHALE	ESCHRICHTIUS ROBUSTUS
GRAY'S BEAKED WHALE	MESOPLODON GRAYI
HARBOR PORPOISE	PHOCOENA PHOCOENA
HEAVISIDE'S DOLPHIN	CEPHALORHYNCHUS HEAVISIDI
HUBBS' BEAKED WHALE	MESOPLODON CARLHUBBSI
HUMPBACK WHALE	MEGAPTERA NOVAEANGLIAE
KILLER WHALE	ORCINUS ORCA
LAGENORHYNCHINE DOLPHINS	LAGENORHYNCHUS SP.
LONG-FINNED PILOT WHALE	GLOBICEPHALA MELAENA
MELON-HEADED WHALE, ELECTRA	PEPONOCEPHALA ELECTRA
MINKE WHALE	BALAENOPTERA ACUTOROSTRATA
NARWHAL	MONODON MONOCEROS
NORTHERN BOTTLENOSE WHALE	HYPEROODON AMPULLATUS
NORTHERN RIGHT WHALE DOLPHIN	LISSODELPHIS BOREALIS
PACIFIC WHITE-SIDED DOLPHIN	LAGENORHYNCHUS OBLIQUIDENS
PILOT WHALES UNSPECIFIED	GLOBICEPHALA SP.
PYGMY KILLER WHALE	FERESA ATTENUATA
PYGMY RIGHT WHALE	CAPEREA MARGINATA
PYGMY SPERM WHALE	KOGIA BREVICEPS
RIGHT WHALES UNSPECIFIED	BALAENA SP.
RISSE'S DOLPHIN, GRAMPUS	GRAMPUS GRISEUS
ROUGH-TOOTHED DOLPHIN	STENO BREDANENSIS
SEI WHALE	BALAENOPTERA BOREALIS

## COMMON NAME

## SCIENTIFIC NAME

-----  
 SHEPHERD'S BEAKED WHALE  
 SHORT-FINNED PILOT WHALE  
 SOUTHERN RIGHT WHALE  
 SPERM WHALE  
 SPINNER DOLPHIN  
 SPOTTED DOLPHIN  
 SPOTTED DOLPHIN  
 STENELLINE DOLPHINS  
 STRAP-TOOTHED WHALE  
 STRIPED DOLPHIN, STREAKER  
 TRUE'S BEAKED WHALE  
 UNSPECIFIED CETACEANS  
 UNSPECIFIED TOOTHED WHALES  
 VAQUITA, COCHITO  
 WHITE WHALE, BELUKHA  
 WHITE-BEAKED DOLPHIN

-----  
 TASMACECUS SHEPHERDI  
 GLOBICEPHALA MACRORHYNCHUS  
 BALAENA AUSTRALIS  
 PHYSETER CATODON  
 STENELLA LONGIROSTRIS  
 STENELLA ATTENUATA  
 STENELLA FRONTALIS  
 STENELLA SP.  
 MESOPLONDON LAYARDII  
 STENELLA COERULEOALBA  
 MESOPLONDON MIRUS  
 CETACEA  
 ODONTOCETI  
 PHOCOENA SINUS  
 DELPHINAPTERUS LEUCAS  
 LAGENORHYNCHUS ALBIROSTRIS

## PINNIPEDS/SIRENIANS

-----  
 AMSTERDAM ISLAND FUR SEAL  
 ARCTOCEPHALINE FUR SEALS  
 ATLANTIC HARBOR SEAL  
 BAIKAL SEAL  
 BEARDED SEAL  
 CALIFORNIA SEA LION  
 CASPIAN SEAL  
 CRABEATER SEAL  
 DUGONG  
 GRAY SEAL  
 HARBOR SEALS  
 HARP SEAL, GREENLAND SEAL  
 HAWAIIAN MONK SEAL  
 HOODED SEAL, BLADDERNOSE SEAL  
 KERGUELEN FUR SEAL  
 LARGHA SEAL, SPOTTED SEAL  
 LEOPARD SEAL  
 NORTHERN ELEPHANT SEAL  
 NORTHERN FUR SEAL  
 NORTHERN SEA LION, STELLER SEA LION  
 PACIFIC HARBOR SEAL  
 RIBBON SEAL  
 RINGED SEAL  
 ROSS SEAL  
 SOUTH AFRICAN FUR SEAL  
 SOUTH AMERICAN SEA LION  
 SOUTHERN ELEPHANT SEAL  
 UNSPECIFIED MARINE MAMMALS  
 UNSPECIFIED PINNIPEDS  
 WALRUS  
 WEDDELL SEAL  
 WEST INDIAN MANATEE  
 WESTERN ATLANTIC HARBOR SEAL

ARCTOCEPHALUS TROPICALIS  
 ARCTOCEPHALUS SP.  
 PHOCA VITULINA VITULINA  
 PHOCA SIBIRICA  
 ERIGNATHUS BARBATUS  
 ZALOPHUS CALIFORNIANUS  
 PHOCA CASPICA  
 LOBODON CARCINOPHAGUS  
 DUGONG DUGON  
 HALICHOERUS GRYPUS  
 PHOCA VITULINA  
 PHOCA GROENLANDICA  
 MONACHUS SCHAUINSLANDI  
 CYSTOPHORA CRISTATA  
 ARCTOCEPHALUS GAZELLA  
 PHOCA LARGHA  
 HYDRURGA LEPTONYX  
 MIROUNGA ANGUSTIROSTRIS  
 CALLORHINUS URSINUS  
 EUMETOPIAS JUBATUS  
 PHOCA VITULINA RICHARDI  
 PHOCA FASCIATA  
 PHOCA HISPIDA  
 OMMATOPHOCA ROSSII  
 ARCTOCEPHALUS PUSILLUS  
 OTARIA FLAVESCENS  
 MIROUNGA LEONINA  
 UNSPECIFIED MARINE MAMMALS  
 PINNIPEDIA  
 ODOBENUS ROSMARUS  
 LEPTONYCHOTES WEDDELLI  
 TRICHECHUS MANATUS  
 PHOCA VITULINA CONCOLOR

TABLE 4  
SYNOPSIS OF PERMIT APPLICATIONS

	AS OF March 31, 1982		April 1, 1982 TO March 31, 1983		AS OF March 31, 1983	
	SCIENTIFIC RESEARCH	PUBLIC DISPLAY	SCIENTIFIC RESEARCH	PUBLIC DISPLAY	SCIENTIFIC RESEARCH	PUBLIC DISPLAY
NO. OF APPLICATIONS SUBMITTED	232	266	9	28	2	555
NO. OF ANIMALS REQUESTED(TOTAL)	581,579	1,367	321	50,810	250	634,481
OF THESE:						
TAKEN BY KILLING	23,156	0	0	16	0	23,172
TAKEN AND KEPT ALIVE	412	1,125	99	3	18	1,801
KILLED IN CAPTIVITY	49	0	0	0	0	49
TAKEN AND RELEASED	536,766	44	219	3,140	232	540,401
FOUND DEAD	1,594	0	0	0	0	1,594
STRANDED/EXCHANGED	104	198	3	0	0	315
IMPORTS	3,072	0	0	1	0	3,073
HARASS	16,426	0	0	47,650	0	64,076
ACTION TAKEN						
NO. OF APPLICATIONS FORWARDED TO MARINE MAMMAL COMMISSION	191	201	5	24	9	431
NO. OF APPLICATIONS REVIEWED BY MARINE MAMMAL COMMISSION	189	198	5	20	8	420
NO. OF APPLICATIONS WITHDRAWN	6	17	1	0	0	24
NO. OF APPLICATIONS REFERRED TO FISH AND WILDLIFE	0	0	0	1	0	1
NO. OF APPLICATIONS REFERRED TO STATES	14	1	0	0	0	15
NO. OF APPLICATIONS REFERRED TO REGIONS	5	13	2	0	1	21
NO. OF APPLICATIONS RESOLVED THROUGH AGREEMENT	1	2	0	0	0	3
NO. OF APPLICATIONS RETURNED DUE TO INSUFFICIENT OR INAPPROPRIATE SUBMITTAL	19	39	1	1	5	66
NO. OF APPLICATIONS DENIED	2	8	0	0	0	10
NO. OF APPLICATIONS APPROVED	185	186	5	16	7	399
NO. OF APPLICATIONS PENDING	0	0	0	10	5	16
NO. OF ANIMALS APPROVED(TOTAL)	580,347	869	263	4,435	37	585,951
OF THESE:						
TAKEN BY KILLING	21,614	0	0	0	0	21,614
TAKEN AND KEPT ALIVE	382	719	88	0	33	1,222
KILLED IN CAPTIVITY	49	0	0	0	0	49
TAKEN AND RELEASED	535,047	0	175	910	0	536,132
FOUND DEAD	1,112	0	0	0	0	1,112
STRANDED/EXCHANGED	89	150	0	0	4	243
IMPORTS	3,050	0	0	0	0	3,050
HARASS	19,004	0	0	3,525	0	22,529

NOTE: APPLICATIONS AND PERMITS INVOLVING HARASSMENT OF MARINE MAMMALS OR TAKING/IMPORTING OF MARINE MAMMALS FOUND DEAD USUALLY DO NOT SPECIFY NUMBERS, AND THEREFORE ARE NOT REFLECTED IN THE NUMBERS OF ANIMALS FOR THESE CATEGORIES.



TABLE 5  
NUMBER OF CETACEANS REQUESTED IN SCIENTIFIC RESEARCH/PUBLIC DISPLAY PERMIT APPLICATIONS(1)

COMMON NAME	REQUESTED				REQUESTED				REQUESTED				CUMULATIVE TOTAL REQUESTED
	AS OF	THRU	APRIL 1, 1982	MARCH 31, 1983	AS OF	THRU	APRIL 1, 1982	MARCH 31, 1983	AS OF	THRU	APRIL 1, 1982	MARCH 31, 1983	
	TAKEN AND KILLED BY	TAKEN AND KILLED BY	TAKEN AND KILLED BY	TAKEN AND KILLED BY	TAKEN AND KILLED BY	TAKEN AND KILLED BY	TAKEN AND KILLED BY	TAKEN AND KILLED BY	TAKEN AND KILLED BY	TAKEN AND KILLED BY	TAKEN AND KILLED BY	TAKEN AND KILLED BY	
	ALIVE	DEAD/STRND	ALIVE	DEAD/STRND	ALIVE	DEAD/STRND	ALIVE	DEAD/STRND	ALIVE	DEAD/STRND	ALIVE	DEAD/STRND	
ATLANTIC SPOTTED DOLPHIN	---	---	---	---	---	---	---	---	---	---	---	---	10
ATLANTIC WHITE-SIDED DOLPHIN	---	---	---	---	---	---	---	---	---	---	---	---	21
BAIRD'S BEAKED WHALE	---	---	---	---	---	---	---	---	---	---	---	---	31
BLACK RIGHT WHALE, NORTHERN RIGHT	---	---	---	---	---	---	---	---	---	---	---	---	10
BLUE WHALE	---	---	---	---	---	---	---	---	---	---	---	---	75
BOTTLENOSE DOLPHINS	---	---	---	---	---	---	---	---	---	---	---	---	52,089
BOWHEAD WHALE	70	612	---	---	---	---	---	---	---	---	---	---	270
BRYDE'S WHALE	---	---	---	---	---	---	---	---	---	---	---	---	420
COMMONER'S DOLPHIN	---	---	---	---	---	---	---	---	---	---	---	---	26
COMMON DOLPHIN	155	26	---	---	---	---	---	---	---	---	---	---	75,932
CUVIER'S BEAKED WHALE	---	---	---	---	---	---	---	---	---	---	---	---	2
DALL'S PORPOISE	960	---	---	---	---	---	---	---	---	---	---	---	1,892
DUSKY DOLPHIN	---	---	---	---	---	---	---	---	---	---	---	---	76
DWARF SPERM WHALE	---	---	---	---	---	---	---	---	---	---	---	---	3
FALSE KILLER WHALE	---	---	---	---	---	---	---	---	---	---	---	---	20
FIN WHALE, FINBACK	---	---	---	---	---	---	---	---	---	---	---	---	395
FINLESS PORPOISE	---	---	---	---	---	---	---	---	---	---	---	---	6
FRASER'S (SARAWAK) DOLPHIN	70	---	---	---	---	---	---	---	---	---	---	---	1,120
GINKGO-TOOTHED BEAKED WHALE	---	---	---	---	---	---	---	---	---	---	---	---	3
GRAY WHALE	---	---	---	---	---	---	---	---	---	---	---	---	238
HARBOR PORPOISE	---	---	---	---	---	---	---	---	---	---	---	---	264
HUBBES' BEAKED WHALE	---	---	---	---	---	---	---	---	---	---	---	---	6
HUMPBACK WHALE	---	---	---	---	---	---	---	---	---	---	---	---	765
KILLER WHALE	---	---	---	---	---	---	---	---	---	---	---	---	389
LONG-FINNED PILOT WHALE	---	---	---	---	---	---	---	---	---	---	---	---	32
MELON-HEADED WHALE, ELECTRA	45	4	---	---	---	---	---	---	---	---	---	---	349
MINKE WHALE	---	---	---	---	---	---	---	---	---	---	---	---	893
NARWHAL	---	---	---	---	---	---	---	---	---	---	---	---	4
NORTHERN RIGHT WHALE DOLPHIN	---	---	---	---	---	---	---	---	---	---	---	---	150
PACIFIC WHITE-SIDED DOLPHIN	---	---	---	---	---	---	---	---	---	---	---	---	627
PILOT WHALES UNSPECIFIED	---	---	---	---	---	---	---	---	---	---	---	---	19
PYCHY KILLER WHALE	45	8	---	---	---	---	---	---	---	---	---	---	353
PYCHY SPERM WHALE	---	---	---	---	---	---	---	---	---	---	---	---	21
RISSEO'S DOLPHIN, GRAMPUS	70	10	---	---	---	---	---	---	---	---	---	---	1,202
ROUGH-TOOTHED DOLPHIN	70	9	---	---	---	---	---	---	---	---	---	---	5,129
SEI WHALE	---	---	---	---	---	---	---	---	---	---	---	---	470
SHORT-FINNED PILOT WHALE	70	32	---	---	---	---	---	---	---	---	---	---	276
SOUTHERN RIGHT WHALE	---	---	---	---	---	---	---	---	---	---	---	---	10
SPERM WHALE	---	---	---	---	---	---	---	---	---	---	---	---	1,055
SPINNER DOLPHIN	2,929	27	---	---	---	---	---	---	---	---	---	---	106,929
SPOTTED DOLPHIN	4,925	10	---	---	---	---	---	---	---	---	---	---	162,734
STENELLINE DOLPHINS	---	---	---	---	---	---	---	---	---	---	---	---	103
STRIPED DOLPHIN, STREAKER	100	---	---	---	---	---	---	---	---	---	---	---	50,165
UNSPECIFIED CETACEANS	370	43	---	---	---	---	---	---	---	---	---	---	1,654
VAQUITA, COCHITO	---	---	---	---	---	---	---	---	---	---	---	---	2
WHITE WHALE, BELUKHA	90	20	---	---	---	---	---	---	---	---	---	---	1,018
WHITE-BEAKED DOLPHIN	---	2	---	---	---	---	---	---	---	---	---	---	2
TOTALS:(2)	9,969	920	0	454,706(3)	516	0	157	0	1,012	0	467	280	

- (1) SPECIMEN IMPORTS AND HARASSMENT REQUESTS NOT INCLUDED IN THIS TABLE.  
 (2) WHERE PERMIT APPLICANTS REQUESTED A TOTAL NUMBER OF ANIMALS TO BE TAKEN WITHOUT SPECIFYING THE NUMBER TO BE TAKEN FROM A PARTICULAR SPECIES, THE NUMBER REQUESTED WAS LISTED UNDER UNSPECIFIED CETACEA.  
 (3) A SINGLE APPLICATION REQUESTED 432,850 CETACEANS AND ACCOUNTS FOR NEARLY THE TOTAL NUMBER IN THIS CATEGORY.

TABLE 6  
NUMBER OF PINNIPEDS REQUESTED IN SCIENTIFIC RESEARCH/PUBLIC DISPLAY PERMIT APPLICATIONS(1)(2)

COMMON NAME	R E Q U E S T E D										CUMMULAT- IVE TOTAL REQUESTED
	AS OF March 31, 1982					R E Q U E S T E D					
	TAKEN BY KILLING	TAKEN AND KEPT ALIVE	KILLED IN CAPTIVITY	TAGGED OR TAKEN AND RELEASED	FOUND AND DEAD/ STRND	TAKEN BY KILLING	TAKEN AND KEPT ALIVE	KILLED IN CAPTIVITY	TAGGED OR TAKEN AND RELEASED	FOUND AND DEAD/ STRND	
ARCTOCEPHALINE FUR SEALS	2	---	---	80	---	---	---	---	---	---	82
BAIKAL SEAL	---	4	---	---	---	---	---	---	---	---	4
BEARDED SEAL	880	2	---	400	70	---	---	---	---	---	1,352
CALIFORNIA SEA LION	534	941	4	3,317	589	---	---	---	160	8	5,553
CASPIAN SEAL	---	2	---	---	---	---	---	---	---	---	2
CRABEATER SEAL	3,288	---	---	9,055	---	---	---	---	---	---	12,343
GRAY SEAL	---	38	---	---	1	---	3	---	---	---	42
HARBOR SEALS	7,789	123	---	6,277	212	---	---	---	255	2	14,658
HARP SEAL, GREENLAND SEAL	---	40	---	---	---	---	---	---	---	---	40
HAWAIIAN MONK SEAL	---	2	---	2,239	---	16	3	---	1,710	---	3,970
KERGUELEN FUR SEAL	151	---	---	980	---	---	---	---	---	---	1,131
LEOPARD SEAL	1,120	---	---	1,100	---	---	---	---	---	---	2,220
NORTHERN ELEPHANT SEAL	688	8	---	3,130	---	---	---	---	---	---	3,826
NORTHERN FUR SEAL	154	13	---	29,118	303	---	---	---	180	---	29,768
NORTHERN SEA LION, STELLER SEA LION	16,315	35	---	9	3	---	---	---	---	---	47
RIBBON SEAL	755	2	---	12,564	116	---	---	---	55	---	29,050
RINGED SEAL	1,680	12	---	400	---	---	---	---	---	---	1,157
ROSS SEAL	283	6	---	707	125	---	---	---	---	---	2,524
SOUTH AFRICAN FUR SEAL	---	6	---	1,115	---	---	---	---	---	---	1,404
SOUTH AMERICAN SEA LION	---	12	---	10	---	---	2	---	---	---	16
SOUTHERN ELEPHANT SEAL	153	---	---	---	---	---	---	---	---	---	14
UNSPECIFIED MARINE MAMMALS	---	---	---	490	50	---	---	---	---	---	643
UNSPECIFIED PINNIPEDS	13,600	---	12	100	---	---	---	---	---	---	13,712
WALRUS	600	---	---	---	---	---	---	---	---	---	600
WEDDELL SEAL	609	25	37	11,340	---	---	---	---	---	---	12,011
WEST INDIAN MANATEE(2)	---	1	---	---	---	---	---	---	---	---	1
TOTALS:(3)	48,601	1,272	53	82,431	1,469	16	8	0	2,360	10	136,220

(1) SPECIMEN IMPORTS AND HARASSMENT REQUESTS NOT INCLUDED IN THIS TABLE.

(2) STRENTANS HAVE BEEN INCLUDED IN THIS TABLE IN LIEU OF CREATING A SEPARATE TABLE FOR THE ONE SPECIES REQUESTED.

(3) WHERE PERMIT APPLICANTS REQUESTED A TOTAL NUMBER OF ANIMALS TO BE TAKEN WITHOUT SPECIFYING THE NUMBER TO BE TAKEN FROM A PARTICULAR SPECIES, THE NUMBER REQUESTED WAS LISTED UNDER UNSPECIFIED PINNIPEDS OR UNSPECIFIED MARINE MAMMALS, IF CETACEANS ALSO WERE INVOLVED.

TABLE 7  
NUMBER OF CETACEANS AUTHORIZED IN SCIENTIFIC RESEARCH/PUBLIC DISPLAY PERMIT APPLICATIONS(1)

COMMON NAME	A U T H O R I Z E D AS OF March 31, 1982				A U T H O R I Z E D April 1, 1982 THRU March 31, 1983				CUMULAT- IVE TOTAL AUTHORIZED
	TAKEN BY KILLING	TAKEN AND KEPT ALIVE	KILLED IN CAPTIVITY	TAGGED OR TAKEN AND RELEASED	FOUND DEAD/ STRND	TAKEN BY KILLING	TAKEN AND KEPT ALIVE	TAGGED OR FOUND TAKEN AND DEAD/ RELEASED STRND	
ATLANTIC WHITE-SIDED DOLPHIN	---	6	---	5	---	---	---	---	11
BLACK RIGHT WHALE, NORTHERN RIGHT	---	---	---	10	---	---	---	---	10
BLUE WHALE	---	---	---	40	---	---	---	---	40
BOTTLENOSE DOLPHINS	70	422	---	51,204	21	---	33	---	51,750
BOWHEAD WHALE	---	---	---	170	190	---	---	---	360
BRYDE'S WHALE	---	---	---	410	---	---	---	---	410
COMMON DOLPHIN	155	18	---	75,727	---	---	---	---	75,900
DALL'S PORPOISE	960	---	---	910	---	---	---	---	1,870
DUSKY DOLPHIN	---	---	---	76	---	---	---	---	76
FALSE KILLER WHALE	---	12	---	6	---	---	---	---	18
FIN WHALE, FINEBACK	---	---	---	340	---	---	---	---	340
FRASER'S (SARAWAK) DOLPHIN	70	---	---	1,050	---	---	---	---	1,120
GRAY WHALE	---	---	---	222	100	---	---	10	332
HARBOR PORPOISE	---	6	---	105	1	---	---	---	112
HUMBACK WHALE	---	---	---	160	---	---	---	520	680
KILLER WHALE	---	10	---	85	---	---	---	---	95
LONG-FINNED PILOT WHALE	---	2	---	---	30	---	---	---	32
MELON-HEADED WHALE, ELECTRA	45	4	---	300	---	---	---	---	349
MINKE WHALE	---	---	---	860	---	---	---	---	860
NORTHERN RIGHT WHALE DOLPHIN	---	---	---	130	---	---	---	---	130
PACIFIC WHITE-SIDED DOLPHIN	---	23	---	527	---	---	---	---	550
PYGMY KILLER WHALE	45	4	---	300	---	---	---	---	349
RISSO'S DOLPHIN, GRAMPUS	70	8	---	1,105	---	---	---	---	1,183
ROUGH-TOOTHED DOLPHIN	70	9	---	5,050	---	---	---	---	5,129
SEI WHALE	---	---	---	440	---	---	---	---	440
SHORT-FINNED PILOT WHALE	70	29	---	135	---	---	---	---	234
SPERM WHALE	---	---	---	860	---	---	---	---	860
SPINNER DOLPHIN	2,929	21	---	103,967	---	---	---	---	106,917
SPOTTED DOLPHIN	4,925	10	---	157,793	---	---	---	---	162,728
STENELLINE DOLPHINS	---	---	---	100	---	---	---	---	100
STRIPED DOLPHIN, STREAKER	100	---	---	50,050	---	---	---	---	50,150
UNSPECIFIED CETACEANS	340	43	---	914	---	---	---	---	1,297
VAQUITA, COCHITO	---	---	---	---	2	---	---	---	2
WHITE WHALE, BELUKHA	25	20	---	700	80	---	---	---	825
WHITE-BEAKED DOLPHIN	---	2	---	---	---	---	---	---	2
TOTALS:(2)	9,874	649	0	453,751(3)	424	0	33	530	0 465,261

(1) SPECIMEN IMPORTS AND HARASSMENT ACTIVITIES NOT INCLUDED IN THIS TABLE.

(2) WHERE A PERMIT SPECIFIED THE TOTAL NUMBER OF ANIMALS TO BE TAKEN WITHOUT SPECIFYING THE NUMBER TO BE TAKEN FROM A PARTICULAR SPECIES, THE NUMBER AUTHORIZED WAS LISTED UNDER UNSPECIFIED CETACEA.

(3) A SINGLE PERMIT AUTHORIZED 432,850 CETACEANS AND ACCOUNTS FOR NEARLY THE TOTAL NUMBER IN THIS CATEGORY.

TABLE 8  
NUMBER OF PINNIPEDS AUTHORIZED IN SCIENTIFIC RESEARCH/PUBLIC DISPLAY PERMIT APPLICATIONS(1)

COMMON NAME	A U T H O R I Z E D AS OF March 31, 1982				A U T H O R I Z E D April 1, 1982 THRU March 31, 1983				CUMMULAT- IVE TOTAL
	TAKEN BY KILLING	TAKEN AND KEPT ALIVE	KILLED IN CAPTIVITY	TAGGED OR TAKEN AND RELEASED	FOUND DEAD/ STRND	TAKEN BY KILLING	KEPT ALIVE	TAGGED OR FOUND TAKEN AND DEAD/ RELEASED STRND	
ARCTOCEPHALINE FUR SEALS	2	---	---	80	---	---	---	---	82
BAIKAL SEAL	---	4	---	---	---	---	---	---	4
BEARDED SEAL	660	2	---	400	70	---	---	---	1,132
CALIFORNIA SEA LION	534	339	2	3,287	440	---	---	4	4,606
CASPIAN SEAL	---	2	---	---	---	---	---	---	2
GRABEATER SEAL	3,288	---	---	9,055	---	---	---	---	12,343
GRAY SEAL	---	27	---	5	---	---	---	---	32
HARBOR SEALS	1,637	84	---	6,007	52	---	---	150	7,930
HARP SEAL, GREENLAND SEAL	---	40	---	---	---	---	---	---	40
HAWAIIAN MONK SEAL	---	---	---	1,826	---	---	---	50	1,876
KERGUELEN FUR SEAL	151	---	---	980	---	---	---	---	1,131
LARGHA SEAL, SPOTTED SEAL	920	---	---	1,100	---	---	---	---	2,020
LEOPARD SEAL	688	8	---	3,130	---	---	---	---	3,826
NORTHERN ELEPHANT SEAL	154	6	---	29,118	282	---	---	180	29,740
NORTHERN FUR SEAL	---	20	---	---	---	---	---	---	20
NORTHERN SEA LION, STELLER SEA LION	800	---	---	12,564	8	---	---	---	13,372
RIBBON SEAL	655	2	---	400	---	---	---	---	1,057
RINGED SEAL	1,400	12	---	704	125	---	---	---	2,241
ROSS SEAL	283	6	---	1,115	---	---	---	---	1,404
SOUTH AFRICAN FUR SEAL	---	---	---	10	---	---	---	---	10
SOUTH AMERICAN SEA LION	---	12	---	---	---	---	---	---	12
SOUTHERN ELEPHANT SEAL	153	---	---	490	---	---	---	---	643
UNSPECIFIED MARINE MAMMALS	15	---	---	15	---	---	---	---	30
UNSPECIFIED PINNIPEDS	20	---	12	100	25	---	---	---	157
WALRUS	200	---	---	---	---	---	---	---	200
WEDDELL SEAL	609	25	37	11,181	---	---	---	---	11,852
TOTALS:(2)	12,169	589	51	81,567	1,002	0	0	380	95,762

(1) SPECIMEN IMPORTS AND HARASSMENT ACTIVITIES NOT INCLUDED IN THIS TABLE.

(2) WHERE A PERMIT SPECIFIED THE TOTAL NUMBER OF ANIMALS TO BE TAKEN WITHOUT SPECIFYING THE NUMBER TO BE TAKEN FROM A PARTICULAR SPECIES, THE NUMBER AUTHORIZED WAS LISTED UNDER UNSPECIFIED PINNIPEDS OR UNSPECIFIED MARINE MAMMALS, IF CETACEANS WERE ALSO INVOLVED.

TABLE 9  
SUMMARY OF PERMITS FOR PERMANENT REMOVAL FROM THE WILD - CETACEANS  
AS OF March 31, 1983

SPECIES	***** PERMITS ***** NUMBER OF ANIMALS *****										*****	
	ISSUED	EXPIRED	CURRENT	REQUESTED	AUTHORIZED	REPLACEMENTS	AUTHORIZATION	TAKEN	TAKE		(1)	REMAINING
					EXPIRED		EXPIRED					
ATLANTIC WHITE-SIDED DOLPHIN	1	0	1	6	6	0	0	0	6			
BOTTLENOSE DOLPHINS	87	67	20	528	514	23	118	327	105			
COMMON DOLPHIN	5	3	2	181	173	5	144	27	7			
DALL'S PORPOISE	1	0	1	960	960	0	0	0	960			
FALSE KILLER WHALE	4	1	3	12	12	0	2	5	5			
FRASER'S (SARAWAK) DOLPHIN	2	2	0	70	70	0	70	0	0			
HARBOR PORPOISE	1	1	0	6	6	0	6	0	0			
KILLER WHALE	4	4	0	11	10	0	0	10	0			
LONG-FINNED PILOT WHALE	1	0	1	2	2	0	0	0	0			
MELON-HEADED WHALE, ELECTRA	3	2	1	49	49	0	45	2	2			
PACIFIC WHITE-SIDED DOLPHIN	5	3	2	23	23	0	8	24	12			
PYGMY KILLER WHALE	3	2	1	49	49	0	45	0	4			
RISSE'S DOLPHIN, GRAMPUS	4	2	2	78	78	0	70	1	7			
ROUGH-TOOTHED DOLPHIN	5	3	2	79	79	2	72	2	7			
SHORT-FINNED PILOT WHALE	11	7	4	97	96	3	76	18	6			
SPINNER DOLPHIN	4	2	2	2,956	2,950	3	2,766	179	13			
SPOTTED DOLPHIN	3	2	1	4,935	4,935	0	4,666	271	10			
STRIPED DOLPHIN, STREAKER	1	1	0	100	100	0	100	0	0			
UNSPECIFIED CETACEANS	4	3	1	383	383	0	348	0	35			
WHITE WHALE, BELUKHA	7	3	4	45	45	1	15	19	12			
WHITE-BEAKED DOLPHIN	1	0	1	2	2	0	0	0	2			
TOTAL NUMBER OF ANIMALS:				10,572	10,542	37	8,551	885	1,195			

(1) ANIMALS TAKEN INCLUDE THOSE INADVERTENTLY KILLED DURING THE COURSE OF RESEARCH AUTHORIZING TYPES OF TAKE OTHER THAN PERMANENT REMOVAL.

TABLE 10  
SUMMARY OF PERMITS FOR PERMANENT REMOVAL FROM THE WILD - PINNIPEDS  
AS OF March 31, 1983

SPECIES	***** PERMITS ***** NUMBER OF ANIMALS *****										TAKE	
	ISSUED	EXPIRED	CURRENT	REQUESTED	AUTHORIZED	REPLACEMENTS	AUTHORIZATION EXPIRED	TAKEN (1)	REMAINING			
ARCTOCEPHALINE FUR SEALS	1	1	0	2	2	0	2	0	0			
BAIKAL SEAL	1	1	0	4	4	0	0	4	0			
BEARDED SEAL	7	4	3	630	630	0	153	175	310			
CALIFORNIA SEA LION	73	69	4	869	855	13	124	292	480			
CASPIAN SEAL	1	1	0	2	2	0	2	0	0			
CRABEATER SEAL	5	3	2	3,288	3,288	0	177	272	2,839			
GRAY SEAL	3	3	0	24	24	0	10	16	0			
HARBOR SEALS	33	27	6	1,580	1,551	0	476	875	316			
HARP SEAL, GREENLAND SEAL	1	1	0	40	40	0	20	20	0			
KERQUELEN FUR SEAL	3	1	2	151	151	0	6	0	145			
LEOPARD SEAL, SPOTTED SEAL	5	3	2	820	820	0	128	111	600			
LEOPARD SEAL	7	4	3	696	696	0	38	72	586			
NORTHERN ELEPHANT SEAL	3	1	2	160	160	0	3	22	136			
NORTHERN FUR SEAL	2	1	1	20	20	0	0	10	10			
NORTHERN SEA LION, STELLER SEA LION	7	3	4	780	780	0	106	310	364			
RIBBON SEAL	7	4	3	630	630	0	256	66	308			
RINGED SEAL	9	5	4	1,318	1,318	0	440	269	610			
ROSS SEAL	6	4	2	289	289	0	28	1	260			
SOUTH AMERICAN SEA LION	3	3	0	12	12	0	4	8	0			
SOUTHERN ELEPHANT SEAL	4	2	2	153	153	0	8	0	145			
UNSPECIFIED MARINE MAMMALS	1	1	0	0	15	0	11	4	0			
UNSPECIFIED PINNIPEDS	2	1	1	12	32	3	15	0	20			
WALRUS	1	1	0	200	200	0	20	180	0			
WEDDELL SEAL	8	5	3	671	671	0	73	60	538			
TOTAL NUMBER OF ANIMALS:				12,351	12,343	16	2,100	2,767	7,667			

(1) ANIMALS TAKEN INCLUDE THOSE INADVERTENTLY KILLED DURING THE COURSE OF RESEARCH AUTHORIZING TYPES OF TAKE OTHER THAN PERMANENT REMOVAL.

TABLE 11-IWC COMMERCIAL CATCH LIMITS, 1973-1982<sup>1/</sup>

	25th Meeting (1973)	26th Meeting (1974)	27th Meeting (1975)	28th Meeting (1976)	29th Meeting (1977)	30th Meeting (1978)	31st Meeting (1979)	32nd Meeting (1980)	33rd Meeting (1981)	34th Meeting (1982)
<u>Southern Hemisphere</u>										
Fin	1,450 2/	1,000 2/	220 2/	0	0	0	0	0	0	0
Minke	5,000 2/	7,000 2/	6,810	8,900	5,690	6,221	8,102	7,072	8,102	7,072
Sei	4,500 2/	4,000 2/	2,230	1,863	771	0	0	0	0	0
Sperm (male)	8,000	8,000	5,570	3,894	4,538	3,820	580	300	0	0
Sperm (female)	5,000	5,000	4,870	697	1,370	1,055	264	886 3/	866 3/	165 2/
Bryde's	0	0	0	0	0	0	0	0	0	0
<u>North Pacific</u>										
Fin	550	300	0	0	0	0	0	0	0	0
Minke	.....	.....	.....	541	400	400	1,361	1,361	1,361	1,361
Sei and Bryde's	3,000	2,000	0	0	0	0	0	0	0	0
Sei	.....	.....	0	0	0	0	0	0	0	0
Bryde's	.....	.....	1,363	1,000	524	454	479	529	526	546
Sperm (male)	6,000	6,000	5,200	4,320	5,105	3,800	1,350	890	0	400 5/
Sperm (female)	4,000	4,000	3,100	2,880	1,339	0	0	0	0	0
<u>North Atlantic</u>										
Fin	.....	.....	365	455	459	455	604	701	561	293
Minke	.....	.....	2,550	2,483	2,555	2,552	2,543	2,554	2,554	2,434 6/
Sei	.....	.....	.....	132	84	84	100	100	100	100
Sperm	.....	.....	.....	685	685	685	273	130	0	0
TOTAL COMMERCIAL QUOTAS	37,500	37,300	32,578	28,050	23,520	19,526	15,656	14,523	14,070	12,371
Other 7/	8,173	5,173	1,358	0	0	0	0	0	0	0
TOTAL	45,673	42,473	33,936	28,050	23,520	19,526	15,656	14,523	14,070 8/	12,371

1/ Catch limits are for Antarctic whaling season (December of year of meeting through April of following year) and all coastal seasons of year after meeting. The Commission decided at the 32nd Meeting to apply quotas to coastal whaling seasons in the year in which they begin.

2/ Catch limit covering Antarctic catch only (South of 40 Latitude).

3/ Of this figure, 622 whales could not be taken legally by member countries because of the factory ship moratorium and/or the Indian Ocean Sanctuary.

4/ Available to be taken from the Peruvian stock in a six-month period starting in November 1982.

5/ The Commission also agreed to a 1982 coastal season catch limit of 450. Both catch limits include an allowable bycatch of up to 11.5% females.

6/ Although the Commission adopted no catch limit for the Northeastern stock, the Norwegian Commissioner indicated that his Government would limit catches to 1,690 as though the IWC had in fact adopted such a catch limit. It has therefore been reflected in the figure above.

7/ Whales taken by IWC members but not included in the catch limits.

8/ The figure in parentheses takes into account the reduction discussed in footnote 3 above as well as catch limits totaling 151 North Atlantic fin whales for 1982 that were for stocks that had not been exploited since 1971.

TABLE 12 - POPULATION ESTIMATES  
PINNIPEDIA

Name	Estimated World Total	Comparison of <sup>1/2</sup> Population Data	Arctic Circumpolar	PACIFIC				ATLANTIC				SOUTHERN OCEAN			
				Asia	Alaska	North America	South America	North America	Europe	Africa	South America	New Zealand	Australia	Sub Antarctic	Antarctic
Order: Carnivora Suborder: Pinnipedia Family: Otariidae  California sea Lions ( <u>Zalophus californianus</u> )	110,000	complete				90,000	20,000								
Northern sea lion ( <u>Eumetopias jubatus</u> )	232,000 to 262,600	complete		20,000 to 50,000	200,000	12,600									
South American sea lion ( <u>Otaria flavesceus</u> )	273,000	complete				228,000					45,000				
Australian sea lion ( <u>Neophoca cinerea</u> )	2,000 to 3,000	complete											2,000 to 3,000		
Hooker's (New Zealand) sea lion ( <u>Phocarcos hookeri</u> )	6,000											6,000			
Alaska or Northern fur seal ( <u>Callorhinus ursinus</u> )	1,589,000	best		585,000	1,000,000	4,000									
Guadalupe fur seal ( <u>Arctocephalus townsendi</u> )	1,000	complete				1,000									
Juan Fernandez fur seal ( <u>Arctocephalus philippii</u> )	705 to 750	complete					705 to 750								
Galapagos fur seal ( <u>Arctocephalus galapagoensis</u> )	1,000 to 5,000	incomplete					1,000 to 5,000								

<sup>1/2</sup> All species of pinnipeds are included in the tables because of available data.



POPULATION ESTIMATES  
PINNIPEDIA - Continued

Name	Estimated World Total	Comparison of Population Data	Arctic Circumpolar	PACIFIC	ATLANTIC	SOUTHERN OCEAN
Family: Otariidae						
South American fur seal ( <i>Arctocephalus australis</i> )	346,000	incom- plete		294,000	52,000	
Cape (South Africa) and Australian fur seal ( <i>Arctocephalus pusillus</i> )	870,000	complete			850,000	20,000
New Zealand fur seal ( <i>Arctocephalus forsteri</i> )	58,000	complete				25,000
Antarctic (Kerguelen) fur seal ( <i>Arctocephalus gazella</i> )	350,000	complete				33,000
Subantarctic fur seal ( <i>Arctocephalus tropicalis</i> )	122,900	incom- plete			113,000	350,000
						9,900

POPULATION ESTIMATES  
PINNIPEDIA - Continued

Name	Estimated World Total	Comparison of Population Data	Arctic Circumpolar	PACIFIC				ATLANTIC				SOUTHERN OCEAN			
				Asia	Alaska	North America	South America	North America	Europe	Africa	South America	New Zealand	Australia	Sub Antarctic	Antarctic
Family: Phocidae															
Largha seal ( <u>Phoca largha</u> )	335,000 to 450,000	incom- plete		135,000 to 200,000	200,000 to 250,000										
Harbor (Common) seal ( <u>Phoca vitulina</u> )	388,000 to 407,000	incom- plete		10,000 to 15,000	260,000 to 42,000			28,000 to 38,000	48,000 to 51,000						
Ringed seal ( <u>Phoca [=pusa] hispida</u> )	6 to 7 million	best	6,000,000 to 7,000,000												
Baikal seal ( <u>Phoca sibirica</u> )	40,000 to 50,000	complete		40,000 to 50,000											
Caspian seal ( <u>Phoca caspica</u> )	500,000 to 600,000	complete		500,000 to 600,000											
Harp seal ( <u>Phoca groenlandica</u> )	1,300,000 to 2,300,000	complete						700,000 to 1.5 million	600,000 to 800,000						
Ribbon seal ( <u>Phoca [=histrionphoca] fasciata</u> )	200,000 to 250,000	complete	200,000 to 250,000												
Gray seal ( <u>Halichoerus grypus</u> )	105,500 to 111,500	complete						17,500	88,000 to 94,800						
Bearded seal ( <u>Erignathus barbatus</u> )	exceeds 500,000	incom- plete		exceeds 500,000											
Hooded seal ( <u>Cystophora cristata</u> )	500,000 to 600,000	complete						500,000 to 600,000							

POPULATION ESTIMATES  
PINNIPEDIA - Continued

Name	Estimated World Total	Comparison of Population Data	Arctic Circumpolar	PACIFIC				ATLANTIC				SOUTHERN OCEAN			
Family Phocidae				Asia	Alaska	North America	South America	North America	Europe	Africa	South America	New Zealand	Australia	Sub Antarctic	Antarctic
Mediterranean monk seal		500 best							500						
Mediterranean monk seal ( <i>Monachus monachus</i> )		500 best													
Caribbean monk seal ( <i>Monachus tropicalis</i> )	extinct or near extinct	best													
Hawaiian monk seal ( <i>Monachus schauinslandi</i> )	500 to 1,500	complete				500 to 1,500									
Southern elephant seal ( <i>Mirounga leonina</i> )	600,000	complete						300,000							
Northern elephant seal ( <i>Mirounga angustirostris</i> )	60,000	best				60,000									
Crabeater seal ( <i>Lobodon carcinophagus</i> )	15,000,000	best													15,000,000
Ross seal ( <i>Ommatophoca rossii</i> )	220,000	complete													220,000
Leopard seal ( <i>Hydrurga leptonyx</i> )	500,000	complete													500,000
Weddell seal ( <i>Leptonychotes weddellii</i> )	750,000	complete													750,000

2/ Best = the most comprehensive estimates throughout the range of the species.  
Complete = good population estimates throughout the range of the species.  
Incomplete = population estimates only in parts of the range of the species.

3/ + = A population occurs in this area in addition to numbers estimated from other regions. The numbers are either unknown or the data are not available.

TABLE 13 - POPULATION ESTIMATES  
CETACEA

Name Suborder: Mysticeti Family: Eschrichtiidae	Estimated World Total	1/ Comparison of Population Data	Arctic Circumpolar	PACIFIC				ATLANTIC				SOUTHERN OCEAN			
				Asia	Alaska	North America	South America	North America	Europe	Africa	South America	New Zealand	Australia	Sub Antarctic	Antarctic
Gray whale ( <u>Eschrichtius robustus</u> )	16,000	best		16,000											
Family: Balaenopteridae															
Minke whale ( <u>Balaenoptera acutorostrata</u> )	380,000	incom- plete		+ 2/	+	+			+ 130,000					250,000	
Sei whale ( <u>Balaenoptera borealis</u> )	210,000	incom- plete		18,000	+	+	+		+	+	+		192,000		
Bryde's whale ( <u>Balaenoptera edeni</u> )	25,000	incom- plete		19,000		+	6,000		+	+	+	+	+		
Fin whale ( <u>Balaenoptera physalus</u> )	217,000 to 220,300	complete			34,000				3,600 to 6,300				169,000		
Blue whale ( <u>Balaenoptera musculus</u> )	11,200	complete			1,700				500	+	+		9,000		
Humpback whale ( <u>Megaptera novaeangliae</u> )	6,800 to 8,600	incom- plete			1,000				2,300 to 4,100		+		2,500		
Family: Balaenidae															
Right whale ( <u>Balaena glacialis</u> )	3,620	complete			220				200	+	+		3,200		
Bowhead whale ( <u>Balaena mysticetus</u> )	4,000 to 5,000	complete	+	3,856											

POPULATION ESTIMATES  
CETACEA - Continued

Name	Estimated World Total	Comparison of Population Data	Arctic Circumpolar	PACIFIC				ATLANTIC				SOUTHERN OCEAN			
				Asia	Alaska	North America	South America	North America	Europe	Africa	South America	New Zealand	Australia	Sub Antarctic	Antarctic
Family: Delphinidae															
Atlantic white-sided dolphin ( <u>Lagenorhynchus acutus</u> )	no data	incom- plete						24,000	+						
Pacific white-sided dolphin ( <u>Lagenorhynchus obliquidens</u> )	no data	incom- plete		+		30,000 to 50,000									
Northern right whale dolphin ( <u>Lissodelphis borealis</u> )	no data	incom- plete		+	+	+									
Southern right whale dolphin ( <u>Lissodelphis borealis</u> )	no data	incom- plete													
Risso's dolphin ( <u>Grampus griseus</u> )	no data	incom- plete		+	+	+	+	10,000	+	+	+	+	+	+	
Melon-headed whale ( <u>Peponocephala electra</u> )	no data	incom- plete				+	+								
Pygmy killer whale ( <u>Feresa attenuata</u> )	no data	incom- plete				+	+	+	+	+	+	+			
False killer whale ( <u>Pseudorca crassidens</u> )	no data	incom- plete		+		+	+	+	+	+	+	+	+		
Long-finned pilot whale ( <u>Globicephala melaena</u> )	no data	incom- plete				+	+	+	+	+	+				
Short-finned pilot whale ( <u>Globicephala macrorhynchus</u> )	no data	incom- plete				+	+	+	+	+	+				
Killer whale ( <u>Orcinus orca</u> )	no data	incom- plete	+	+	+	+	+	+	+	+	+	+	+	+	+

POPULATION ESTIMATES  
CETACEA - Continued

Name	Estimated World Total	Comparison of Population Data	Arctic Circumpolar	PACIFIC				ATLANTIC				SOUTHERN OCEAN			
				Asia	Alaska	North America	South America	North America	Europe	Africa	South America	New Zealand	Australia	Sub Antarctic	Antarctic
Suborder: Odontoceti Family: Delphinidae Rough-toothed dolphin ( <u>Steno bredanensis</u> )	no data	incom- plete				+	+		+	+	+				
Bottlenose dolphin ( <u>Tursiops truncatus</u> )	no data	incom- plete		+		+	+	3,000 to 10,000	+	+	+				
Spinner dolphin ( <u>Stenella longirostris</u> )	no data	incom- plete		+		900,000				+	+				
Spotted dolphin ( <u>Stenella attenuata</u> )	no data	incom- plete		+		2.2 million									
Atlantic spotted dolphin ( <u>Stenella plagiodon</u> )	no data	incom- plete						+	+	+	+				
Striped dolphin ( <u>Stenella coeruleoalba</u> )	no data	incom- plete		+		2.3 million		+							
Common dolphin ( <u>Delphinus delphis</u> )	no data	incom- plete		+		900,000		17,500	+	+	+	+	+	+	
Fraser's dolphin ( <u>Lagenorhynchus hosei</u> )	no data	incom- plete				+				+					

POPULATION ESTIMATES  
CETACEA - Continued

Name	Estimated World Total	Comparison of Population Data	Arctic Circumpolar	PACIFIC					ATLANTIC				SOUTHERN OCEAN			
				Asia	Alaska	North America	South America	Europe	North America	Africa	South America		New Zealand	Australia	Sub Antarctic	Antarctic
Family: Phocoenidae																
Harbor porpoise ( <i>Phocoena phocoena</i> )	no data	incomplete		+	+	+	+	+	2,900	+						
Dall's porpoise ( <i>Phocoenoides dalli</i> )	920,000	complete					920,000									
Family: Monodontidae																
Beluga, belukha, white whale ( <i>Delphinapterus leucas</i> )	62,000 to 88,000	complete	62,000 to 88,000													
Narwhal ( <i>Monodon monoceros</i> )	10,000	incomplete	+	+	+	+	10,000	+	+							
Family: Physeteridae																
Sperm whale ( <i>Physeter catodon</i> )	732,000	complete					300,000		22,000	+	+				410,000	
Pygmy sperm whale ( <i>Kogia breviceps</i> )	no data	incomplete		+	+	+	+	+	+	+	+					
Dwarf sperm whale ( <i>Kogia simus</i> )	no data	incomplete		+	+	+	+	+	+	+	+					
Family: Ziphiidae																
Baird's beaked whale ( <i>Berardius bairdii</i> )				+	+	+	+						+	+	+	+

1/ Best = the most comprehensive estimates throughout the range of the species.  
Complete = good population estimates throughout the range of the species.  
Incomplete = population estimates only in parts of the range of the species.

2/ + = A population occurs in this area in addition to numbers estimated from other regions. The numbers are either unknown or the data are not available.

## Appendix B

### Laws and Treaties Governing the Protection of Marine Mammals

Every marine mammal of U.S. concern is protected by one or more U.S. laws or acts, and the conservation of some species is partially assured by international treaty or law. A summary of laws, conventions, and commissions designed to protect marine mammals follows.

#### United States Laws and Treaties

1. Marine Mammal Protection Act of 1972: A U.S. Federal Law that prohibits persons under the jurisdiction of the United States from taking, harassing, or importing any marine mammal or its byproducts into the United States, except when authorized to do so by special permit. Certain natives of Alaska may take marine mammals for subsistence use. (See introduction for a complete description of this Act).

2. Endangered Species Act of 1973: This U.S. Federal law provides a program for the conservation of species that are either endangered now or threatened with extinction within the foreseeable future and their dependent ecosystems, and to implement international conservation conventions. With limited exceptions, the Act prohibits the taking, importing, exporting, and interstate commerce of any endangered species, as well as their parts or products. Exceptions include permits for scientific purposes or the enhancement of propagation or survival of the species, economic hardship exemptions, and subsistence taking by Alaska natives. For threatened species, the Act authorizes the issuance of protective regulations as necessary for their conservation. To accomplish its purposes, the Act authorizes the acquisition of land; authorizes cooperative agreements with States which have an adequate conservation program, including Federal funding of up to two-thirds (or three-fourths when entered with more than one State); prohibits Federal agencies from taking any action that would jeopardize the continued existence of an endangered or threatened species or result in the destruction or modification of its critical habitat unless an exception is granted by the Endangered Species Committee; requires the development of recovery plans; and provides for civil and criminal penalties.

Marine mammals under the jurisdiction of NMFS and listed as endangered species are the blue whale, bowhead whale, fin whale, gray whale, humpback whale, right whale, sei whale, sperm whale, Caribbean monk seal, Hawaiian monk seal, and Mediterranean monk seal.



3. Convention on International Trade in Endangered Species of Wild Fauna and Flora: The Convention, which entered into force on July 1, 1975, provides additional protection for the following marine mammals under the jurisdiction of NMFS: Appendix I--blue whale, bowhead whale, gray whale, humpback whale, right whale, certain stocks of fin and sei whales, Ganges River dolphin, humpbacked dolphin, Indus River dolphin, white flag dolphin, finless porpoise, cochito (porpoise), Caribbean monk seal, Hawaiian monk seal, Mediterranean monk seal, and northern elephant seal; Appendix II--certain stocks of fin and sei whales, all other cetaceans, and the southern elephant seal, Amsterdam Island fur seal, Kerguelen fur seal, New Zealand fur seal, Southern (South American) fur seal, and South African fur seal. Trade is more strictly controlled for Appendix I animals than for Appendix II animals. The U.S. Management Authority for the Convention (U.S. Department of the Interior) controls the import, export, re-export, and introduction from the sea of convention animals through a system of permits and enforcement. Implementation by regulating commerce began May 23, 1977.

4. International Whaling Commission: The IWC was established under a convention signed in Washington, D.C., in December 1946. The membership includes all countries that catch significant numbers of whales except Portugal. The IWC is responsible for whale conservation worldwide. In recent years, the IWC has acted to bring world whaling under control by prohibiting the taking of some species, sharply reducing the authorized catches of species in certain areas, establishing catch quotas by stocks, and implementing an international observer plan for checking compliance with quotas and regulations at land stations and on factoryships. The IWC now regulates the harvest of Bryde's, fin, minke, sei, and sperm whales. The blue, bowhead, gray, humpback, and right whales are completely protected, except for some hunting by aborigines.

5. Whaling Convention Act of 1949: This Act brought into force the International Convention for the Regulation of Whaling signed on December 2, 1946, by the United States and certain other governments. Article III of the International Convention established the IWC.

6. Interim Convention on North Pacific Fur Seals: The convention, ratified in 1957, prohibits most citizens of Canada, Japan, the U.S.S.R., and United States from taking northern fur seals. The exceptions are aboriginal Eskimos, Aleuts, and Indians, who may take them only at sea and by primitive methods. The convention also provides for intensive research on this species by the four countries. The United States and U.S.S.R. commercially harvest northern fur seals on their breeding grounds and regulate the kills on a scientific basis. The Interim Convention has been extended until 1984.

7. Fur Seal Act of 1966: This Act brought into force the Interim Convention on North Pacific Fur Seals.

8. International Convention for the Conservation of Antarctic Seals 1977: The purpose of this convention is to safeguard all species of Antarctic seals and to ensure that, if commercial sealing begins on floating ice of the Southern Ocean, the taking of any species will be subject to strict limitations to prevent overexploitation or damage to their ecosystem. Measures adopted under the Antarctic Treaty of 1959 provide only for the protection of seals and other animals around the shoreline of the Antarctic Continent, but not on floating ice. The convention of 1972 may be applicable to crabeater, leopard, Ross, southern elephant, southern fur seals, and Weddell seals south of latitude 60° south. The Ross, southern elephant, and southern fur seals are protected species, and no taking is permitted.

## Miscellaneous Regulations and Agreements of U.S. Interest

1. International Convention for the Northwest Atlantic Fisheries: Under terms of a convention signed in 1949, ICNAF is responsible for the investigation, protection, and conservation of the fisheries of the Northwest Atlantic. On January 1, 1977, Canada extended its jurisdiction over fisheries to 200 miles. To avoid conflicts in 1977 between Canadian and international regulations, Canada agreed to adopt ICNAF regulations for the 1978 harvest of harp seals and hooded seals.

An amendment to the ICNAF Convention adopted in December 1978 allows the Commission to give scientific advice for management of fisheries within natural fishery limits if requested by a coastal state that is a party to the Convention.

Canada appears to have completed the transition from international to Canadian management of harp and hooded seals within the limits of Canadian fisheries jurisdiction. The United States withdrew from the ICNAF in December 1976 to conform with provisions in the Magnuson Fishery Conservation and Management Act.

2. Canadian Norwegian Agreement on Sealing: On December 22, 1971, these two governments ratified an agreement on sealing and the conservation of seal stocks in the Northwest Atlantic. The agreement applies to the harp seal, but provision is made for extension to hooded and bearded seals and to the walrus.

3. Harp Seal: The U.S.S.R. and Norway signed an agreement in 1958 entitled "Preservation of Seals in the Greenland Sea." The agreement provides for the regulation of harp seal catches by these two nations. The U.S.S.R., however, has not hunted harp seals since 1965.

4. Gray Seal: The U.S.S.R. has prohibited (since 1970) the hunting of gray seals for sport and by amateurs, but permits the taking of these animals for subsistence. Canada uses an 1886 law for authority in regulating the take of gray seals. England has prohibited the hunting of gray seals on the Farne Islands since 1932 and on Orkney Island since 1923. Norway has forbidden hunting at Sor Trondelag since 1923. Finland and Sweden offer bonuses for gray seals taken.

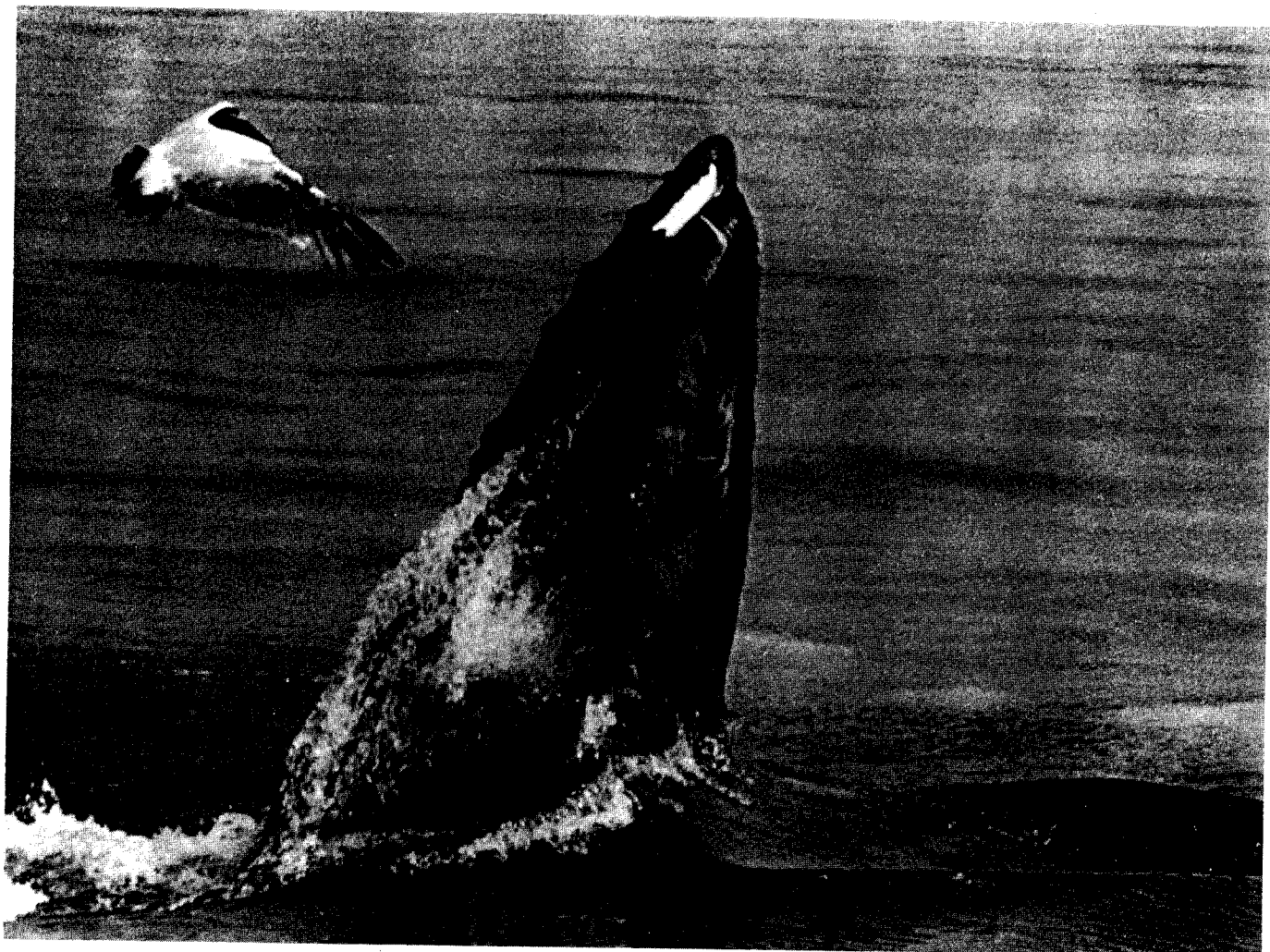
5. Hooded Seal: Canada and Norway prohibit the taking of hooded seals near Newfoundland before March 10, near Jan Mayen Island before March 13, in Denmark Strait from June 15 to July 15, and in northern waters from March 20 to May 5. The U.S.S.R. and Norway in 1958 agreed to prohibit the harvest of hooded seals near Jan Mayen Island before March 13 and banned hunting in Denmark Strait.

## Appendix C

### Notices and Regulations

Final rules and regulations are reprinted each year in the Code of Federal Regulations (CFR). Copies of the following rules, regulations, and notices published in the Federal Register are available from the Office of Protected Species and Habitat Conservation, National Marine Fisheries Service, U.S. Department of Commerce, Washington, D.C. 20235. The following list does not include FR Notices for scientific research and public display permits:

1. FR Vol. 47, No. 68 (April 8, 1982) - Notice of determination that NMFS finds the Government of El Salvador in substantial conformance with U.S. regulations governing the taking of marine mammals incidental to commercial fishing operations.
2. FR Vol. 47, No. 91 (May 11, 1982) - Final rule concerning the taking of bowhead whales by Indians, Aleuts, or Eskimos for subsistence purposes, and rule related notice concerning a cooperative agreement between NOAA and the Alaska Eskimo Whaling Commission.
3. FR Vol. 47, No. 92 (May 12, 1982) - Proposed rule concerning the transfer of marine mammal management to the states.
4. FR Vol. 47, No. 96 (May 18, 1982) - Final rule concerning regulations governing small takes of marine mammals incidental to **specified activities**. Includes specific regulations covering the take of ringed seals incidental to seismic activities in the Beaufort Sea.
5. FR Vol. 47, No. 209 (October 28, 1982) - Rule related notice of amendment of cooperative agreement between NOAA and the Alaska Eskimo Whaling Commission.
6. FR Vol. 48, No. 30 (February 11, 1983) - Notice of issuance of a general permit to the Republic of Korea to take marine mammals incidental to commercial fishing operations.
7. FR Vol. 48, No. 42 (March 2, 1983) - Notice of modification to general permit to the Federation of Japan Salmon Fisheries Cooperative Association.



Humpback Whale / Stellwagen Bank  
Photo by Mason Weinrich, Cetacean Research Unit,  
Gloucester Fishermen's Museum, Gloucester, MA

